

Substance in Kant

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And indeed the question which, both now and of old, has always been raised, and always been the subject of doubt, viz. what being is, is just the question, what is substance?

Aristotle, *Metaphysics Z*

Abstract

In this thesis I discuss the concept of substance in Kant. The guiding question of the thesis is: “How are we to interpret the claim that substance is to be encountered in the objects of perception?” I frame the discussion around two main arguments for the concept of substance as they occur in the First Analogy in the *Critique of Pure Reason*. Through evaluating these arguments in accordance with the guiding question we gain some insight into what a Kantian substance is.

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References and Abbreviations

References to the *Critique of Pure Reason* are to the standard A and B pagination of the first and second editions from 1781 and 1787. Other references to Kant are to the volume and page of *Kants gesammelte Schriften, herausgegeben von der Deutschen Akademie der Wissenschaften*, 29 vols. (Berlin: Walter de Gruyter, 1902), also known as the “Akademie” edition. References to Aristotle use the standard Bekker numbers of the Corpus Aristotelicum based on the page numbers of *Aristotelis Opera, edidit Academia Regia Borussica*, 5 vols. (Berlin: Georg Reimer, 1831–1870). If not otherwise noted I am quoting from the English translations listed in the bibliography. Original text in German is quoted from *Kants gesammelte Schriften* in italics.

Abbreviations and shorthand names in brackets:

Aristotle

Cat *Categories*

Met *Metaphysics*

Kant

A/B *Critique of Pure Reason*, english translation, A and B edition (First Critique; Critique)

KrV *Kritik der reinen Vernunft*, Akademie edition

BL *The Blomberg logic*

ID *On the Form and Principles of the Sensible and the Intelligible World* (Inaugural Dissertation)

L *Logik*

Mr *Metaphysik Mrongovius*

MH *Metaphysik Herder*

MNS *Metaphysical Foundations of Natural Science* (Foundations)

MV *Metaphysik Volckmann*

ND *A New Elucidation of the First Principles of Metaphysical Cognition* (Nova Dilucidatio)

NM *An Attempt to Introduce the Concept of Negative Magnitudes into Philosophy*

OPA *The Only Possible Argument in Support of a Demonstration of the Existence of God* (The Only Possible Argument)

Prol *Prolegomena to Any Future Metaphysics that Will Be Able to Come Forward as a Science* (Prolegomena)

R *Reflexionen*

VL *The Vienna logic*

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1 INTRODUCTION

1.1 ARISTOTLE AND THE INQUIRY INTO BEING

The notion of substance as a primary being goes all the way back to Aristotle: “obviously that which is primarily is the *what*, which indicates the substance of the thing”.¹ His study of being *qua* being is therefore the inquiry into what substance is. The different answers Aristotle gives to this question will influence the metaphysical debate on substance for the subsequent two millennia. To get an overview of the different senses that can be assigned to the concept of substance, it can therefore prove useful to have a swift glance at the concept’s historical roots in Classical Greece.

Aristotle’s discussion of substance is mainly found in the *Categories* and the *Metaphysics*. In the *Categories* a primary substance is defined as “that which is neither said of a subject nor in a subject”.² Subjecthood³ is thus a characteristic of primary substances as fundamental property-bearers. Another important mark is thisness⁴ or individuality. Aristotle gives the individual man as an example of a primary substance, in contrast to the species of man and its many genera, which can only be said to be substances in a secondary sense. A third characteristic of a primary substance is that it is able to receive contraries, unlike anything else that is numerically one, as when an individual man becomes pale at one time and dark at another.⁵ In other words substances have the possibility to undergo change⁶ without losing identity, they are identity-preservers.

In the *Metaphysics* Aristotle explains what it means for a substance to be an ultimate subject of predication. While qualities and determinations are said to be because they are beings of something else, substance is that existent thing that underlies the determinations and in virtue of which they have their existence. As such substance is that which exists independently and primarily; it is self-subsistent.⁷ This is moreover why substance is said to

¹ Met 1028a14–15.

² Cat 2a14.

³ In the remainder of this thesis I will use “subject” as denoting that which support properties. To disambiguate I will use “cognizing subject” or “transcendental subject” when referring to the human mind and its faculties of cognition.

⁴ “As regards the primary substances, it is indisputably true that each of them signifies a certain ‘this’; for the thing revealed is individual and numerically one.” Cat 3b10–12.

⁵ “It is, therefore, distinctive of substance that what is numerically one and the same is able to receive contraries”, Cat 4b17–18.

⁶ “For what has become cold instead of hot, or dark instead of pale, or good instead of bad, has changed (has altered); similarly in other cases too it is by itself undergoing change that each thing is able to receive contraries.” Cat 4a31–34.

⁷ Met 1028a10–30.

be primary in time. There are however two other ways a substance is said to be primary: in formula, and in order of knowledge. That substance is first in formula means that the substance must be present in a definition of what something is.⁸ That substance is first in the order of knowledge signifies that we know a thing most fully when we know its substance. In both these latter cases, substance is understood as “the what it is”, the essence of a thing.⁹

The inquiry into being leaves Aristotle with the multifaceted notion of substance as (i) the ultimate subject that (ii) is a “this”, (iii) preserves identity through change, (iv) is self-subsistent, and (v) is the essence of a thing. Aristotle recognizes that (i) alone renders substance into (vi) a substrate¹⁰, “something of which each of these is predicated, so that its being is different from that of each of the predicates” and “when all else is taken away evidently nothing but matter remains”.¹¹ On this view, substance is matter. However, Aristotle sees (ii) individuality as a chief mark of substance and will not settle with the substrate-notion (vi). The characteristics (iii) and (iv) are compatible with both substance as substrate and substance as individual and do not form independent candidates for substance. There remain two possibilities: either (v) substance is the essence of a thing or (ii) it is an individual. To Aristotle, this is equivalent to the question of whether substance is *form*, or the *compound* of matter and form.

1.2 THE GUIDING QUESTION

What is substance in Kant? To understand Kant’s concept of substance it is necessary to study the argument he puts forth in its particular case.¹² The argument for substance figures as an argument for the “Principle of the persistence of substance” in the First Analogy, a part of a chapter of the *Critique of Pure Reason* called the System of Principles. In the System of Principles Kant argues for the complete number of synthetic *a priori* propositions¹³ that flow from the pure concepts of the understanding. These are the all and only propositions of

⁸ An Aristotelian definition consists of a term *x* to be defined and an essential predicate which is exclusive of the term; its “counterpredicate”. Aristotle argues against the Theory of Forms in rejecting universals as essential predicates by showing that this way of defining something would lead to an infinite regress (the third man argument). Although the essential predicates normally figure as species or genera of things Aristotle will end up also rejecting these as candidates for substances as they contradict the mark of individuality, signifying a “such” and not a “this”. If substance is to be the essence of a thing then the essence cannot be identical to its species or genus.

⁹ “For there is knowledge of each thing only when we know its essence.” Met 1031b1.

¹⁰ In greek, a *hypokeimenon*.

¹¹ Met 1029a10–23.

¹² In the Transcendental Deduction Kant provides arguments for the objective validity of the categories all taken together.

¹³ Synthetic propositions are informative or ampliative in kind, whereas analytic propositions are merely explicative or clarifying. That which is *a priori* in Kant is both universal and necessary.

metaphysics that can have objective validity.¹⁴ For the pure concepts of understanding to be applicable to objects of sensible intuition, they must relate to them through what Kant calls “schemata”. The schema of substance is “persistence”. Accordingly, Kant’s argument for the objective validity of the concept of substance is an argument for substance as persistence.

The principle of the persistence of substance can be interpreted as Kant’s attempt to metaphysically underpin a conservation principle of physics where the total mass or kinetic energy in a system (here: the spatiotemporal world) is preserved. In this way the System of Principles can be seen as arguments for an objectively legitimate and scientific metaphysics. If the emphasis is rather put on the arguments that Kant posits in support of the principles, e.g. that substance as persistence is necessary for the experience of change, then the principles can be interpreted as necessary judgments for the possibility of human (everyday) experience.

How the argument of the First Analogy proceeds and what it sets out to prove has been interpreted in many different ways in the secondary literature. I propose that the disagreement hinges on different ways of understanding the following lines:

Now time cannot be perceived by itself. Consequently it is in the objects of perception, i.e., the appearances, that the substratum must be encountered that represents time in general [...] the substratum [...] is *substance*¹⁵

The different interpretations of this passage result in various views on what our epistemic access to substance could be, which will prove to be determinant of what a Kantian substance is. A sufficient answer to the latter can therefore only come about through a thorough discussion of how this passage is to be interpreted.

This will be the guiding question of the thesis:

How are we to interpret the claim that substance is to be encountered in the objects of perception?

¹⁴ Kant explains that the question of whether metaphysics is possible as a science is tantamount to the question of how synthetic *a priori* propositions are possible and to show how this is so is the positive program of the *Critique*: “Whether metaphysics is to stand or fall, and hence its existence, now depends entirely on the solving of this problem.” Prol 4:276. The actual existence of the well-founded sciences of pure mathematics and pure natural science is evidence that synthetic *a priori* propositions are possible – the question is therefore not whether, but *how* these propositions are possible, see Prol 4:275.

¹⁵ B225, original emphasis.

1.3 STRUCTURE OF THE THESIS

I will frame the discussion of substance around two main interpretations of the argument for the principle of the First Analogy: The first takes the argument for substance to be most explicitly displayed in the first paragraph of the B-edition of the First Analogy. The second mainly bases its argument for substance on a passage occurring at the end of the First Analogy.

The choice of argument is dictated by which one of two versions of the principle of the First Analogy one takes to express most truly what Kant wanted to establish by this principle. The first argument defends the objective validity of the B-edition principle: “In all change of appearances substance persists, and its quantum is neither increased nor diminished in nature.”¹⁶ The second is an argument for the objective validity of the A-edition principle: “All appearances contain that which persists (*substance*) as the object itself, and that which can change as its mere determination, i.e., a way in which the objects exists.”¹⁷

The objective validity of these principles implies the legitimate application of the relational concept of substance–accident to objects of experience. Which principle is argued for therefore has consequences for which concept of substance that is legitimized: Substance as a perceptible backdrop against which changing appearances can be contrasted, or substance as an altering subject in which changing determinations inhere. I will discuss these interpretations in turn. The first part of the thesis will consider substance as an object of perception, and the second part will consider it as altering subject.

For the reconstructed arguments to be warranted in their claims about what substance is, they should prove successful as arguments for the principle of the First Analogy. Both arguments defend the legitimate application of the substance-concept on objects of experience on the grounds that it is a necessary condition for the possibility of the experience of change. I will draw on secondary literature in addition to developing original arguments in evaluating the premises, internal structure and hence the possible success of the reconstructions.

In part one, I will follow the set-up of Allison’s reconstruction of the B-argument as a “backdrop argument”. The backdrop argument defends the objective validity of the substance-concept on the grounds that substance must function as a persistent, perceptible backdrop to shifting appearances for the experience of change to be possible. We will therefore consider what it can mean to have a representation of something persistent. In the discussion of substance as perceptible backdrop, it will prove necessary to clarify what the terms

¹⁶ B224.

¹⁷ A182, original emphasis.

“determination” and “perception” signify in Kant. This will illuminate the relation between perception and the application of the categories to spatio-temporal representations, or what Kant calls the “manifold of intuition” (*Mannigfaltigen der Anschauung*). This will further clarify what it means for an object to be perceptible, and thus what substance must be in order to be an object of perception. Finally, I will use the latter to show that the backdrop argument makes the overall argument in the Analogies circular.

In part two, I will follow the set-up of Van Cleve’s reconstruction of the alteration argument, what I call the “alteration argument + p”. The argument purports to prove the objective validity of the substance-concept in several steps, of which one is to show that every change is an alteration in an ultimate subject. Since substance will eventually be identified with this ultimate subject, I will stress the importance of resolving what kind of unconditionality “ultimate” might refer to, i.e., in which way substance can be unconditioned. The outcome of this discussion will clarify the existence-relation between a substance and its accidents.

I then proceed to discuss the main step in the alteration argument + p, which is to show that every change is an alteration in something or other. Turned the other way around, this is an argument for why absolute existence-changes cannot be possible. To understand this argument it will be necessary to clarify what “change” means in Kant. It will also prove helpful to investigate what Kant means by “the absence of the real”. An absolute existence-change will turn out to be an event where something that did not exist before comes into existence. The argument for the legitimacy of the substance-concept thus purports to show that existence-changes, such as these, are impossible to experience. They can only be experienced when the entity that comes into and goes out of existence is, or is regarded as a determination in an altering subject, and the experience of such alteration requires the application of the substance–accident rule.

In this part of the alteration argument + p, I will depart from Van Cleve’s set-up. I will evaluate three different arguments for why every change is an alteration: the argument from verifiability; the Kant–Frege view; and the alteration argument as presented by Allison. These arguments understand the “experience of change” in different ways, namely, to verify, to report on, or to render change possible (for us). With respect to these different interpretations, the substance-concept is assigned different tasks and degrees of importance.

It will therefore prove important to discuss what “experience” is in Kant: whether it is something subjective or objective; whether it consists of perceptions or the connection of these in judgment; and what function the categories have in making experience possible. I

will clarify the latter upon contrasting the conditions for experience with the conditions for knowledge in Kant. Furthermore, to understand how the substance–accident relation conditions the experience of change, we will examine how the principles and the arguments in the First and Second Analogies relate to one another.

Common to all the arguments for substance as subject of alteration is that they take the epistemic access to substance to be provided through the application of the substance–accident rule. Since the substance–accident rule is a rule for thinking, this implies that substance is somehow thought in the objects of perception. I will argue that there are certain pitfalls related to looking at substance in this way and as a conclusion draw a lesson from this.

2 SUBSTANCE AS OBJECT OF PERCEPTION

2.1 THE BACKDROP ARGUMENT

Perhaps the most natural way to interpret how substance is to be encountered in the objects of perception is to interpret substance *as* an object of perception. The reading that supports this view takes the paragraph inserted in the beginning of the First Analogy in the B-edition to be the core argument of the First Analogy. In this paragraph it is stated that time cannot be perceived in itself, and that as a consequence there must be a substrate in the appearances that represents time. This is taken to imply that the time-replacing substrate must be a *perceptible* object. That is, “an enduring, perceptible object (or objects) is required to provide the backdrop or frame of reference by means of which the succession, simultaneity, and duration of appearances in a common time can be determined.”¹⁸ Allison is the first to label this “the backdrop thesis”,¹⁹ although similar lines of thought are found in Melnick²⁰ and further developed in Guyer²¹ and Van Cleve.²²

The backdrop thesis has intuitive appeal. It is conceivable that change is only possible to perceive if something that does not change, at least in that moment of change, serves as a contrast or backdrop to it. One can imagine that the beginning of the motion of a ball would be hard to detect if the ball was set in motion in an environment that was always moving, as with a ball inside a gravity-pick-machine.²³ And this would hold for the possibility of perceiving simultaneity as well: “if everything were in constant flux, then we could not even be aware of succession as such, not to mention simultaneity.”²⁴

According to Allison the argument in the B-edition of the First Analogy is a progressive argument consisting of four parts that build on each other, where the first part is the backdrop thesis:

- 1) A (relatively) persistent substrate is required as a backdrop in relation to which change can be experienced.

¹⁸ Henry E. Allison, *Kant's transcendental idealism: An interpretation and defense*, Revised and enlarged ed. (New Haven; London: Yale University Press, 2004). 239.

¹⁹ I have another discussion on the backdrop thesis in the final paper: Silje J. Eggestad, «Persistence of substance and time-determination,» (UCSD, 2011). The topic of the paper is transcendental time-determination and I here present an argument for the persistence of substance as that which preserves the unity of time.

²⁰ Arthur Melnick, *Kant's analogies of experience* (Chicago: University of Chicago Press, 1973).

²¹ Paul Guyer, *Kant and the claims of knowledge* (Cambridge; New York: Cambridge University Press, 1987).

²² James Van Cleve, *Problems from Kant* (New York: Oxford University Press, 1999).

²³ The kind of machine that picks out the lottery balls in a lottery. I first used this example in Eggestad, «Persistence of substance and time-determination,».

²⁴ Allison, *Kant's transcendental idealism: An interpretation and defense*: 239.

- 2) Every change must be regarded as an alteration of this substrate.
- 3) The substrate must be absolutely and not only relatively persistent.
- 4) The quantity of this substrate remains throughout all change.²⁵

Evidently these parts do not in themselves form a formally valid argument. They are rather meant to portray the subordinate claims in the overall argument that stepwise lead to the main conclusion, the B-edition principle of the First Analogy: “In all change of appearances substance persists, and its quantum is neither increased nor diminished in nature.”²⁶

This is how the B-argument divides into these parts:

- 1) All appearances are in time, in which, as substratum (as persistent form of inner intuition), both *simultaneity* as well as *succession* can alone be represented. The time, therefore, in which all change of appearances is to be thought, lasts and does not change; since it is that in which succession and simultaneity can be represented only as determinations of it. Now time cannot be perceived by itself. Consequently it is in the objects of perception, i.e., the appearances, that the substratum must be encountered that represents time in general and in which all change or simultaneity can be perceived in apprehension through the relation of the appearances to it.
- 2) However, the substratum of everything real, i.e., everything that belongs to the existence of things, is *substance*, of which everything that belongs to existence can be thought only as a determination.
- 3) Consequently that which persists, in relation to which alone all temporal relations of appearances can be determined, is substance in the appearance, i.e., the real in the appearance, which as the substratum of all change always remains the same.
- 4) Since this, therefore, cannot change in existence, its quantum in nature can also be neither increased nor diminished.²⁷

I will follow Van Cleve in referring to the construal of the B-argument as being based on a backdrop thesis and proceeding in these steps as “the backdrop argument”.

2.1.1 Objections to the argument

Whereas Allison seems to take the background argument to be valid, the argument has met considerable criticism elsewhere in the literature. Van Cleve and others have judged it “seriously wanting”²⁸. The objection is that part two and part three of the argument must be

²⁵ Ibid., 237.

²⁶ B224.

²⁷ B224–25, original emphasis.

²⁸ Van Cleve, *Problems from Kant*: 109.

regarded as dubitable entailments of the backdrop thesis in part one. As far as the backdrop thesis goes, Kant is not committed to anything more than the necessity of a perceptible fixed framework for the perception of succession and simultaneity to be possible. Therefore it does not seem to follow that (a) the backdrop must be absolutely permanent,²⁹ and it does not seem to follow that (b) the change of states must be alterations of the substrate that enables the perception of change.

As an objection to (a), Melnick proposes that in order to determine the coming into and going out of existence of objects of perception all we need is a substrate or frame of reference that exists in a time-interval that reaches over both the time of the beginning and the time of the termination of the object(s).³⁰ Almost any object in the world that is perceptible and has some degree of stability will work as a frame of reference – a clock, the sun, a pendulum.³¹ To secure a unified temporal experience, all we need to do is find overlapping frames of reference and make them “chime” together in a set interval. The further requirement that the chosen frame of reference is to be *absolutely* permanent does not seem to be justified.³²

Although it might turn out that the backdrop argument comes short of proving the absolute persistence of substance, objection (a), as put forth by Melnick and Van Cleve, neglects its argumentative structure. The absolute persistence of the substrate does not follow directly from the backdrop thesis, but is argued for on the ground of the preceding result in

²⁹ I will use “persistence; persistent” and “permanence; permanent” interchangeably to translate the German (*Beharrlichkeit/das Beharrliche; beharrliche*).

³⁰ Melnick, *Kant's analogies of experience*: 67–68. Melnick reads the First Analogy as giving a rule for time-measurement, or determining the duration of objects of perception, an interpretation which has been rejected by most interpreters, see Guyer, *Kant and the claims of knowledge*: 218; Béatrice Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason* (Princeton, N.J.: Princeton University Press, 1998). 343–44; Allison, *Kant's transcendental idealism: An interpretation and defense*: 236.

This is complicated by the fact that Kant himself seems to express this as the function of the First Analogy at certain places, e.g.: “we must always derive the determination of *the length of the time* or also of the positions in time for all inner perceptions from that which presents external things to us as alterable” B156, my emphasis; “They are nothing other than principles of the determination of the existence of appearances in time, in accordance with all three of its *modi*: that of the relation to time itself, as a magnitude (the magnitude of existence, i.e., duration)” A215/B262; and “Only through that which persists does *existence* in different parts of the temporal series acquire a *magnitude*, which one calls *duration*.” A183/B226.

I propose that the possibility of the determination of the duration of objects can rather be seen as a further, analytic consequence of the result of the argument of the First Analogy, than as being the result of the argument itself, which I take to concern the necessary condition for the possibility of determining any temporal relation of appearances.

³¹ Kant gives a similar example in the Refutation of Idealism, except here it is the sun that is changing: “Not only can we perceive all time-determination only through the change in outer relations (motion) relative to that which persists in space (e.g., the motion of the sun with regard to the objects on the earth) [...]” B277–78.

³² I first gave this outline of Melnick’s objection in Eggestad, «Persistence of substance and time-determination,».

part two. In part two, the substrate in part one is conceived of as an ultimate subject that alters while its determinations change. Allison believes it is only in part three that Kant is justified in identifying this ultimate subject with a persistent substance.³³ On Allison's construal, the B-argument therefore proceeds from establishing the need of a substrate in part one, to this substrate being a subject that alters in part two, to the persistence of this subject in part three (and then the preservation of the quantity of substance in part four is supposed to follow).

Recognizing that this is the structure of the backdrop argument, this takes us directly to objection (b): By what argument is it shown that the (at least relatively persistent) backdrop in part one must be the subject that alters in part two? The idea is that although the contrasting relation of a (relatively persistent) backdrop to fluctuant appearances might be necessary for experiencing change, it seems unfounded to claim that the changing appearances have to be ontologically grounded in the backdrop as determinations in a substrate: "even granting the need for a permanent backdrop, why would changes have to be alterations in it? [...] Let the sun be hung as a permanent backdrop in the sky: things under the sun are still free to pop into and out of existence as they please."³⁴ Moreover, the objection seems to be an important one since Kant himself at one place describes the claim that every change is an alteration as the final outcome of the First Analogy.³⁵

Framed as an objection to the backdrop argument, however, objection (b) is somewhat imprecisely formulated. Part two of the argument is a claim about the necessity of *regarding* every change as an alteration, not the necessity that every change *be* an alteration. Generally expressed, Van Cleve and Allison read the claim in part two in these two different ways:

(VC) it is necessary that every change *is* alteration for the experience of change to be possible

(A) it is necessary that every change be *conceived of* as alteration for the experience of change to be possible

Van Cleve thus argues from an ontological condition for a certain experience to be possible, whereas Allison argues from an epistemic one. The latter should come as no surprise as Allison³⁶ famously argues that Kant's transcendental idealism is the result of an investigation of the epistemic conditions of human experience.

³³ A186/B229. In contrast to Allison's set-up of the argument of the B-edition the main body of the text in the First Analogy is not as careful to wait to introduce the subject as substance until the persistence of that subject is properly argued for.

³⁴ Van Cleve, *Problems from Kant*: 108.

³⁵ B233.

³⁶ Allison, *Kant's transcendental idealism: An interpretation and defense*.

2.1.2 The alteration argument

Can Allison provide an argument for the claim in part two as formulated in (A)? Allison admits that there is not much support in the B-argument for the claim that it is necessary that I conceive of change as alteration for the experience of change to be possible. However, he believes he is able to find a “sketch” of an argument in its favor in a passage to the end of the First Analogy:

Alteration can therefore be perceived only in substances, and arising or perishing per se cannot be a possible perception unless it concerns merely a determination of that which persists, for it is this very thing that persists that makes possible the representation of the transition from one state to another, and from non-being into being, which can therefore be empirically cognized only as changing determinations of that which lasts.³⁷

Allison takes this argument to be based on the twofold premise that time cannot be perceived in itself and thus no single observation will be sufficient to determine that a change has taken place. To determine this, we must have two distinct observations and then notice a difference between them. This, however, is not sufficient either. Since our apprehension is always successive, it is not possible to infer from the succession of our appearances alone that an actual change has occurred.³⁸ For all we know, Allison explains, we could be apprehending simultaneous (distinct) objects, such as when having the successive observations of a desk at t_1 and a bookcase at t_2 . The successive observations do not warrant an inference to the conclusion that the desk and the bookcase succeed one another objectively in time.

However, not even the objective relocation of the desk with the bookcase would, if empirically verifiable, be sufficient for the experience of change. This is, according to Allison, because the relevant notion of change is a change that concerns a change *in or of the object*. That someone has replaced the desk with a bookcase in the office will not make us believe that a change in the object has occurred, rather only a change of location.³⁹ Allison concludes that for the experience of change to be possible we are constrained to link the two observations to a common subject⁴⁰ as its determinations. We do this through the application of the substance–accident rule. The experience of change is thus possible only by conceiving

³⁷ A188/B231.

³⁸ A182/B225.

³⁹ Allison, *Kant's transcendental idealism: An interpretation and defense*: 241.

⁴⁰ Remembering that “subject” here is used in the sense of something which takes properties, not to be confused with a cognizing subject. See note in introduction.

of the successive observations as an alteration in a subject.⁴¹ I will call this argument, as Allison interprets it, “the alteration argument”.⁴²

Since our present concern is the internal consistencies of the backdrop argument, we will save the discussion of this argument to the next chapter and for now ask about the relation between the alteration argument thus presented and the backdrop thesis that precedes it. It is dubious whether a successful alteration argument justifies the move from part one to part two of the backdrop argument. As it is construed, the alteration argument does not seem to build on the backdrop thesis in any substantial way. The argument *might* require that we identify some property-bearer to which the succeeding appearances can belong, but nothing in the argument requires that this subject must be the substrate of the real rather than e.g. an individual substance. Particularly, it does not seem to be necessary at all that the subject is a backdrop or an object of perception. Whereas the backdrop thesis argues that the experience of change is possible only through the contrasting of a (relatively persisting) backdrop with succeeding appearances, part two now argues that the relevant relation between the substrate and the appearances is not given through perception, but through a rule for thinking.⁴³ The successive appearances must be conceived of or judged to be an alteration of a subject, not contrasted with that subject perceptually.

The backdrop argument meets criticism for not being internally consistent, and this criticism is warranted. Although the objections as originally put forward by Melnick and Van Cleve do not hit the target precisely, they still make the right point: the parts of the argument do not build on each other in the way they are meant to. The argument for the necessity of conceiving every change as an alteration in part two is not in need of the backdrop thesis in part one. And since according to Allison part three is to build on part two, the identification of substance with persistence is not dependent on the backdrop thesis either. The alteration argument stands on its own, being in no need of the backdrop thesis.

⁴¹ Allison, *Kants transcendental idealism: An interpretation and defense*: 241, n. 16.

⁴² Guyer, *Kant and the claims of knowledge*: 221. Guyer believes Kant is attempting to prove both that every change is alteration, and that the subject of alteration is persistent, from a mere analysis of the concept of alteration. In A187/B230 Kant defines alteration (*Veränderung*) as “a way of existing that succeeds another way of existing of the very same object”, where the “way of existing” is a real determination in the object. The term “change” (*Wechsel*) is used as the successive being and non-being (or vice versa) of an appearance or state of affairs. Change is not defined as a successive being and non-being *of the same object*, so Guyer is wrong that part two of the backdrop argument could follow from an analysis of the concepts involved. More on change later. Concerning the second claim, Kant seems to offer something like an inference to persistence in the line: “Hence everything that is altered is *lasting*, and only its *state changes*”. A187/B230. However, since Guyer is right that this would be the fallacious attempt to prove a synthetic proposition by an analytic argument, I do not believe Kant is attempting to make such an argument here.

⁴³ “the assignment of the successively represented states of affairs to an enduring substratum [...] functions as a rule through which we think such a change.” Allison, *Kants transcendental idealism: An interpretation and defense*: 242.

If the backdrop thesis is shown to be redundant in the overall argument for the principle of the First Analogy, what does this say about the relevance and credibility of its claim? After all, it is the backdrop thesis that tells us that we are to encounter substance as an object of perception.

2.2 SUBSTANCE – PERCEPTIBLE OR NOT?

Both Guyer and Van Cleve question the plausibility of the backdrop thesis as such. The backdrop thesis asserts that time is in need of a perceptible substitute since it cannot be perceived by itself, and this substitute is equated with substance as the substrate of the real. Van Cleve states that “his own [Kant’s] best candidate for substance is not perceptible either. We do not perceive the matter that undergoes transformation from wood to ashes or from caterpillar to butterfly; we only conceive of it.”⁴⁴ From what reasons do Guyer and Van Cleve argue that substance is not an object of perception?

2.2.1 The transitory character of our representations

Guyer bases his argument against the backdrop thesis on a note in the B-preface that concerns the Refutation of Idealism. Here Kant remarks that representations are never persistent, not even those of matter:

The representation of something *persisting* in existence is not the same as a *persisting representation*; for that can be quite variable and changeable, as all our representations are, even the representation of matter, while still being related to something permanent, which must therefore be a thing distinct from all my representations and external, the existence of which is necessarily included in the *determination* of my own existence [...]⁴⁵

I believe it is quite clear that Kant here contrasts the properties of representation as mental activity with the properties of the content of representation. In other words, this is the contrast between representations as determinations of the mind in reflective activity and the determinations of the (inner or outer) objects of which there are representations. What are Kant’s reasons for stating that all representations are variable and changeable?

In the Transcendental Aesthetic Kant shows that all representations as determinations of the mind must be subject to the form of inner sense, i.e., time. Time has only one dimension, and its moments or parts are successive.⁴⁶ The Transcendental Deduction further

⁴⁴ Van Cleve, *Problems from Kant*: 107.

⁴⁵ Bxli, note.

⁴⁶ A31–33/B47–50.

establishes that the form of inner sense is the way in which the mind is internally affected by its spontaneous activity⁴⁷ and that it is through this activity or synthesis that representations are first given to us.⁴⁸ Representations are thus given to us, or apprehended, in a successive manner.⁴⁹ That representations are apprehended successively does not imply that the representations taken one by one must be momentary. Although this seems to be what Kant actually means,⁵⁰ it is not necessary for making the point. As long as the mind is perceptually active, it will entertain multiple successive representations of which no single one can be absolutely persistent or everlasting if the representations are to succeed one another (time has only one dimension). All representations are variable and changeable in this sense.

Guyer's criticism of the backdrop thesis is twofold: First he concludes from the transitory character of representations that there can be "no general principle that the temporal properties of what is represented must be mirrored by what represents them".⁵¹ This is perfectly in line with Kant. Kant frequently contrasts the successive character of representation with the temporal determinations of what is represented,⁵² and the Analogies use this anti-empiricist principle as a first premise. Pace Locke, the objective temporal structure is not directly detectable from, or comparable with, the succession of our ideas.⁵³ This is precisely why transcendental time-determination is necessary.

There is accordingly a lack of a mirroring relation between the temporal character of representations and the temporal properties of their content. Guyer takes this, and the premise that substance is to represent time in general, to show that it is impossible to infer the

⁴⁷ B129.

⁴⁸ §§24–26.

⁴⁹ "[T]he synthesis of the manifold through which we successively determine inner sense" B154. Due to the way in which it affects inner sense, Kant sometimes calls the synthetic activity itself successive: "a pure act of the successive synthesis of the manifold" B155*.

⁵⁰ E.g. in the Anticipations of Perception: "Apprehension, merely by means of sensation, *fills only an instant* (if I do not take into consideration the succession of many sensations)." A167/B209; "*the mere sensation in an instant* and not through successive synthesis of many sensations" A168/B210 and "the mere sensation in one moment" A176/B218. My emphases.

⁵¹ Guyer, *Kant and the claims of knowledge*: 220.

⁵² "Our *apprehension* of the manifold of appearance is always successive, and is therefore always changing. We can therefore never determine from this alone whether this manifold, as object of experience, is simultaneous or successive". A182/B225, original emphasis.

⁵³ According to Locke we acquire the idea of succession from reflecting "on the train of ideas which we find to appear one after another in our own minds." Locke, *Essay*, Book I, Ch. 14, §4. From the belief that our ideas succeed one another at a certain pace, Locke argues that the possibility of the perception of real succession depends on the succession happening at a pace close enough to the speed of the train of our ideas: "Let a cannon-bullet pass through a room, and in its way take with it any limb or fleshy parts of a man; it is as clear as any demonstration can be, that it must strike successively the two sides of the room. It is also evident, that it must touch one part of the flesh first, and another after, and so in succession: and yet I believe nobody who ever felt the pain of such a shot, or heard the blow against the two distant walls, could perceive any succession either in the pain or sound of so swift a stroke." Locke, *Essay*, Book I, Ch. 14, §10.

persistence of substance from the unchangeable nature of time.⁵⁴ Aside from the fact that the backdrop argument actually never makes this inference,⁵⁵ Guyer here equivocates on the concept of representation. Substance is not to “represent time” in the way that our representations as mental entities represent their content; substance is to substitute, qua representational content, what cannot be a representational content itself. Although it is not clear how substance is to represent time in general (this is a theme for discussion) I think it is rather evident that this is *not* how.

The second implication that Guyer reads from the cited passage is the imperceptibility of substance: “By stating that even representations of matter are themselves transitory, in spite of the permanence which we ascribe to matter, Kant implies that the permanence of matter itself – that is, permanence in empirical objects, rather than of time itself – must be inferred rather than directly perceived.”⁵⁶ Guyer seems to argue that for directly perceiving something to be possible, the properties of the representational act and the properties of the representational content must be identical, or at least have some similarity.

This is an odd argument to make in a Kantian context. Lockean simple ideas hold a strong resemblance relation with the primary qualities in the objects that are their causes,⁵⁷ and perhaps Lockean perception as a first reflective idea could be taken to inherit this resemblance. But these are surely not the constituents of Kant’s theory of perception: In contrast with causal theories of perception, Kant contends that perception as consciousness of empirical representational content is possible only as the result of a spontaneous activity of the mind; an activity which combines sensory material into a necessary unity. Neither the representational activity nor the representational content is a resemblant image of what we receive in sensibility, and in no way do any of these present an image of that which affects us.⁵⁸

Guyer’s argument does not preclude substance, as persistent substrate of the real, from being an object of perception. Rather, the preceding discussion provides the solution to some possibly confusing passages: When Kant refers to the representation of persistence as a “persisting image of sensibility”⁵⁹, as a “persisting intuition”⁶⁰ or a “standing and abiding

⁵⁴ “The time [...] lasts and does not change” B225 and “To time, therefore, which is itself unchangeable and lasting” A144/B183.

⁵⁵ Here Guyer too neglects the set-up of the backdrop argument, in which the argument for the persistence of substance build upon *the alteration argument* and not directly on the backdrop thesis.

⁵⁶ Guyer, *Kant and the claims of knowledge*: 219.

⁵⁷ Locke, *Essay*, Book II, Ch. VIII, §15.

⁵⁸ For one, the transcendental object will be in lack of any spatio-temporal features.

⁵⁹ A525/B553.

⁶⁰ B413 and B417.

intuition”⁶¹, it is not the intuition itself that is persistent, but the content that it displays. Are there other ways in which the perceptibility of substance can be questioned? Returning to the quote of Van Cleve above, his point seems to be that it is the determinations of matter and not the matter itself that we perceive (matter being Kant’s candidate for substance, according to Van Cleve). What are his reasons for stating this?

Van Cleve does not list any reasons why he believes we do not perceive substance in itself but only its determinations. There is, however, some textual evidence to be found in support of his claim. This is a reflection from the latter part of Kant’s pre-critical period:

We do not have sensations of outer substances (only of their outer effects on us), rather we add them to sensations in thought. But only in relation to the affections of our mind; thus not as what they are in themselves, but as that which is permanent in appearance.⁶²

Other than textual evidence, is it possible to present some philosophical reasons why substance cannot be perceived? I can think of two routes that Van Cleve might wish to pursue. One turns on what is directly perceptible in contrast to what can only be conceived of on the basis of our perceptions. This is reminiscent of Guyer’s claim above. The other route is to argue that substance cannot be encountered in perception, due to its function as an ultimate subject of predication. We will treat the first of these argumentative strategies here; in the next chapter we will discuss the claim that substance is an ultimate subject of predication. There we will also consider the positive side of Van Cleve’s claim that we *conceive* of substance.

2.2.2 Pre-critical determination

To evaluate Van Cleve’s claim that only the determinations of a substance are directly perceived, we will enter a broader discussion on the Kantian notions of determination, perception and determining activity. First let us have a look at a paragraph from the First Analogy. Kant is here seen to contest the Lockean objection⁶³ that the supposedly existing substrate of the qualities of which we get our ideas remains completely unknowable to us:

⁶¹ B350 and B381.

⁶² R5358, 18:160 (1776–77): “Wir empfinden nicht äußere substantzen (nur äußere Wirkungen auf uns), sondern wir denken sie nur dazu. aber nur in dem Verhältnis auf die affectionen unseres Gemüths; also nicht, was sie an sich selbst sind, sondern das perdurable in der Erscheinung.” See also R 4054, 17:399.

⁶³ According to Locke there are three ideas that make up the complex idea of (corporeal) substance: the idea of primary qualities, the idea of secondary qualities and the idea of the ability to receive contraries, or to alter. However, the complex idea of substance is not only the collection of these simple ideas, but in addition always contains “the confused idea of something to which they belong, and in which they subsist.” Locke, *An Essay Concerning Human Understanding*, Book II, Ch. 23, §3. This idea of an ultimate subject of properties is a hollow concept without meaning, something that can never become known.

The determinations of a substance that are nothing other than particular ways for it to exist are called *accidents*. [...] Now if one ascribes a particular existence to this real in substance (e.g., motion, as an accident of matter), then this existence is called “inherence”, in contrast to the existence of the substance, which is called “subsistence”. Yet many misinterpretations arise from this, and it is more precise and correct if one characterizes the accident only through the way in which the existence of a substance is positively determined.⁶⁴

The first line states that the determinations of a substance that are called accidents are the way in which the substance exists. This appears to be an ontological claim about the existence-relation between substances and their accidents. The final part of the paragraph then states that it is better if the accident is characterized through the way in which the existence of a substance is *positively determined*. Here it appears that the accident is playing a role in a determining process of the substance. What could this determining process be?

The verb “to determine” (*bestimmen*) has several meanings in Kant.⁶⁵ Something can be determined nomologically, according to necessary laws; it can be determined causally, by the force of something to which it stands in a causal relation; and it can be determined epistemically, by a cognizing subject to which it stands in an intentional relation. From the absence of any discussion of laws or causal relations leading up to the passage above I think it is reasonable to conclude that it is the epistemic determining relation Kant has in mind here.⁶⁶

How does the epistemic determining of substances through accidents come together with the suggestion that we perceive these accidents or determinations? Before we can answer this we must have a look at what Kant means by the noun “determination” (*Bestimmung*). From the student notes from Kant’s logic lectures in the period 1760 to the early 1770s, we learn that there are internal and external grounds of cognition: “The former are determinations in the thing itself, by which it can be cognized without comparison with other things. Through the latter, however, I only acquire a cognition of a thing insofar as I compare it with other things.”⁶⁷ Determinations are properties that ontologically pertain to a thing in itself, and which differ with respect to the way they ground cognition and what kind of knowledge they can give. This difference is due to whether the determinations are *inner* or *outer*.

⁶⁴ A186–87/B229–30.

⁶⁵ See Gary Hatfield’s introduction to his 2004 revised edition of the *Prolegomena*, xxv. I do not purport to give an exhaustive list of all the nuanced senses of (*bestimmen*) here, but only the main types of which one I believe is the relevant here.

⁶⁶ In the Second Analogy Kant is also explicit that substances are never the effects but rather the determining grounds in causal relations, which precludes that the accident in question can be *causally* determinant of its substance. See e.g. A205–6/B251, and A227/B279 in the discussion of the third Postulate.

⁶⁷ BL 24:106.

We can draw a parallel of this division between inner and outer determinations in both Leibniz and Locke. The intrinsic properties of the monad in Leibniz and the primary qualities of a thing in Locke are those that provide knowledge of what the thing is – its real essence. In contrast, relational properties, such as a thing’s spatio-temporal properties, are reducible to the intrinsic properties in Leibniz, whereas in Locke the secondary qualities can only inform us about the relation between the thing and the affected cognizing subject through sensation. There are thus determinations that belong essentially to a thing, and determinations that are accidental in the way that they inform about the relations between things or the relation between the thing and a cognizing subject.

What about the epistemic access to these determinations? Leibniz has a notion of perception as a less distinct representational version of thought. To have a distinct representation of an individual thing is thus possible only through conceptually determining it, where “to determine” here means “to render definite or specific”. We remember from the Introduction that for Leibniz, an individual thing is only fully known when its concept is completely determined. That means that a determinate object in Leibniz is an object that has been rendered distinct through determining which of all possible, contradictory predicates (e.g., A or non-A) which pertain to the thing. This is what Baumgarten calls “the principle of thoroughgoing determination”.⁶⁸ As we have seen, Locke has something like a causal theory of perception where simple ideas resemble the primary qualities in an object, as the effect of these primary qualities. “A first reflection” of these simple ideas then amounts to perception. Due to this causal relation, the perceptions from simple ideas of primary qualities have a strong resemblance to the primary qualities, or inner determinations, in objects. Van Cleve’s claim is that a substance is not directly perceptible, but that its determinations are. It is time to look at that which is directly perceptible in critical Kant.

2.2.3 Perception and transcendental time-determination

Kant sometimes talks of direct perception or immediate consciousness⁶⁹ of the existence of things, but this should not make one believe that Kant has a causal or resemblant image-theory of perception like Locke. What is really immediate in Kant, is the manifold of intuition, which in the case of empirical intuition is the matter that we receive through our

⁶⁸ “The collection of all determinations compossible in a being is its complete determination.” Baumgarten, *Metaphysics*, §148. A complete concept is one that contains one of every possible pair of contradictorily opposed predicates. This way of knowing an object makes it possible to analytically infer properties as pertaining to a thing from its other essential properties, as when Leibniz infer God’s existence from his essential property as a most perfect being.

⁶⁹ See e.g. Refutation of Idealism, B276–77.

senses, structured in space-time: “In whatever way and through whatever means a cognition may relate to objects, that through which it relates *immediately* to them, and at which all thought as a means is directed as an end, is intuition”.⁷⁰ However, through a mere intuitive representation, the content of these intuitions, or appearances, is not yet represented *as* something, that is, they do not establish an intentional relation to a *determinate* object. For the possibility of representing something *as* something, consciousness is required: “Without the relation to an at least possible consciousness appearance could never become an object of cognition for us, and would therefore be nothing for us”.⁷¹ Consciousness, however, is not something that “is just there”. In the Deduction, Kant purports to show that consciousness requires self-consciousness, which again requires a spontaneous activity of the understanding⁷² where the manifold of intuition is gone through and combined synthetically into a conceptualizable unity.⁷³ Only through this activity do we have consciousness of the content of intuition as representing a determinate object. The consciousness of the content of intuition that in this way has attained reference to an object is what Kant calls “perception”.

How is it that the referential relation to a determinate object is established? That is, how is the manifold of intuition synthetically combined into an objective unity of which we are conscious?⁷⁴ This happens through the act of judgment:

I find that a judgment is nothing other than the way to bring given cognitions to the *objective* unity of apperception. That is the aim of the copula *is* in them [...] For this word designates the relation of the representations to the original apperception and its *necessary unity* [...] ⁷⁵

That is, for our representations to represent something as belonging in an object, and not just as the property of our representations they must be combined into a necessary unity in accordance with the logical functions of judgment. “But now the *categories* are nothing other than these very functions for judging, insofar as the manifold of a given intuition is determined with regard to them.”⁷⁶ In what way do the categories determine the content of an empirical intuition?

⁷⁰ A19/B33, my emphasis.

⁷¹ A120.

⁷² See §17, B136–39. Whether Kant actually succeeds in this is not necessary to our present concern; here our interest is what notion of perception Kant himself operates with.

⁷³ “Every intuition contains a manifold in itself, which however would not be represented as such [...] Now in order for unity of intuition to come from this manifold [...] it is necessary first to run through and then to take together this manifoldness, which action I call *the synthesis of apprehension*”. A99, original emphasis.

⁷⁴ What Kant calls “the objective unity of apperception”.

⁷⁵ §19, B141.

⁷⁶ §20, B143. Kant stresses the determining function of the categories in several places: “*the categories* [...] are concepts of an object in general, by means of which its intuition is regarded as *determined* with regard to one of the *logical functions* for judgments.” B128, original emphasis. Also MNS 4:475.

The categories are determinant of the intuitive manifold in that they combine the manifold into a *necessary* unity: “Through the category of substance [...] if I bring the concept of a body under it, it is determined that its empirical intuition in experience must always be considered as subject, never as mere predicate.”⁷⁷ This necessary unity is the objective unity of consciousness.⁷⁸ Accordingly, the empirical intuition is first determined when its content is combined in such a way that it attains (possible) objective reference. The Schematism further establishes that it is only under certain sensible conditions that the categories bring the sensible manifold into objective unity.⁷⁹ These conditions are the categories’ schemata, or their “temporal meanings”, which function as a bridge between what is sensible and thus temporal, and what is universal and *a priori*. We know that the schema of e.g. substance is persistence. Through their schemata the categories determine the sensible manifold in time such that the sensible manifold is given objective temporal properties. Kant calls this determining activity *transcendental time-determination*. Thus, for something to be represented as a determinate object, it must first have gone through transcendental time-determination.

So far, we have seen that perception is not as “direct” in Kant as one might have thought. Rather it is the result of a synthesis on sensible manifold that is categorially⁸⁰ conditioned. This means that for something to be perceptible its sensible content in intuition must first have been synthetically combined according to one of the logical functions of judgment directed at intuition.⁸¹ We remember that “to determine” has several meanings in

⁷⁷ B128–29.

⁷⁸ This far in the Deduction it is actually not proven yet that actual perception of *spatio-temporal* manifold is conditioned by the categories. This is the task of the second part of the Deduction, culminating in §26. The previous outline of the first part of the Deduction is only a sketch. There are huge controversies in the literature about what the Deduction is to prove and what its argumentative strategy is that we will not have space to address here.

⁷⁹ “Thus the schemata of the concepts of pure understanding are the true and sole conditions for providing them with a relation to objects, thus with *significance*”, A146/B185, original emphasis.

⁸⁰ I will use “categorial” and “categorially” for that which is conditioned by the categories, in contrast to the Kantian terms “categorical” and “categorically” which refer to the first logical function of judgment, that of the relation *subject–predicate*.

⁸¹ Kant scholars differ about exactly how the categories condition this synthesis and whether this synthesis already conceptualizes the intuition or whether it only renders it conceptualizable. This often hinges on whether one understands the synthetic activity as executed by the understanding, which makes the content of empirical intuition at least in some minimal sense conceptual, or the imagination, which may allow for non-conceptual content of intuitions. For recent arguments for the conceptualist reading, see e.g. Henry E. Allison, «Where have all the categories gone? Reflections on Longuenesse’s reading of Kant’s transcendental deduction,» *Inquiry: An interdisciplinary journal of philosophy* 43, no. 1 (2000); Hannah Ginsborg, «Was Kant a nonconceptualist?,» *Philosophical Studies* 137, no. 1 (2008). From the non-conceptualist camp: Lucy Allais, «Kant, non-conceptual content and the representation of space,» *Journal of the History of Philosophy* 47, no. 3 (2009); Robert Hanna, «Kantian non-conceptualism,» *Philosophical Studies* 137, no. 1 (2008). For our purposes it is enough to establish that the synthesis of sensible manifold must be categorially determined *somehow or other* for perception of a determinate object to be possible. We will therefore not discuss these different positions here.

Kant, where one of them is to determine epistemically. From the preceding discussion it is clear that the pivotal epistemic determining activity in Kant is categorial determination as *transcendental time-determination* in that it first makes the perception of determinate objects possible. Any other epistemic determining activity, such as conceptual determination or making a proposition certain, will be derivative of transcendental time-determination. However, within critical⁸² Kant's ontological framework, which is Transcendental Idealism, any determinate object is the outcome of this determining synthesis on sensible matter in space-time. Accordingly, any law-governed or causally determined object must be the result of this synthesis too. This means that in critical Kant, transcendental time-determination is the pivotal determining activity as such.⁸³

2.2.4 Determination as synthetic predicate

What does this tell us about what a determination is in critical Kant? In his earlier logic lectures, we have seen that determinations were something that pertained to things in themselves, but in critical Kant the only determinate objects that we have access to, are the ones that are the result of the categorial determining activity. One of the categorial relations that combine the content of empirical intuition into an objective unity is the substance–accident relation. And from the passage cited above, we know that accidents are determinations that concern the way in which a substance exists. This means that the synthesis according to the substance–accident function first represents the content of empirical intuition as the existence-relation between determinations and their object. Sensible content represented *as* determinations is thus also the outcome of the categorially conditioned synthesis.

This explains why it is better to characterize an accident through the way in which the existence of a substance is positively determined, since it is only insofar as a thing is

⁸² I here use “critical” to designate the philosophical period of Kant starting from the *Critique of Pure Reason*.

⁸³ There are more ontologically motivated readings that might disagree with this hierarchy of determinations. In *Kant and the Metaphysics of Causality*, Watkins presents the problem of transcendental time-determination through a “hybrid-model”. He interprets the Analogies to be “concerned with the kind of ontological structure that is required for our empirical knowledge to be true.” Eric Watkins, *Kant and the metaphysics of causality* (Cambridge; New York: Cambridge University Press, 2005). 202. That is, he takes the real relations of substance–accident, cause–effect and mutual interaction to be metaphysically determining grounds of the temporal relations between objects: “the point is not that the objects already have determinate temporal properties and we simply must use the categories to determine the intuition that are given to us in sensibility in order to discover these properties. Rather it is that the objects do not already have determinate temporal properties. The objects must be temporally determined by something else, something active (e.g., a determining ground), to have temporally determinate properties. All three Analogies posit something active, namely a ground, to bring about or determine the temporal features of objects”, *ibid.*, 264.

positively determined that accidents inhere in it.⁸⁴ This is also why Kant in a note dated to the period 1790–95 identifies determination with a *synthetic predicate*, as that which can first be conceived of as a predicate of an object through synthesis: “Every synthetic predicate, i.e., determination, has its ground, namely something else through which it is connected *a priori* with the concept of a thing. For otherwise the determination would not be objective.”⁸⁵ The determination is a *real predicate*, in contrast to a mere logical predicate, in that it is determinant of an object.⁸⁶ “Determination”, as the result of a determining synthesis, thus acquires an entirely new meaning in the *Critique*.

After having attained an understanding of what determinations and perception are in Kant, we are finally equipped to address the objection of Van Cleve: we perceive only the determinations of a substance, and not the substance itself. True, if the objection is that substance cannot be immediately displayed in intuition I believe neither Kant nor anyone else would disagree, “since no one would say that the category, e.g., causality, could also be intuited through the sense and is contained in the appearance”.⁸⁷ This would be tantamount to having a Lockean simple idea of a category, and Locke and Kant (and Hume, for that matter) agree that this is not possible. However, the preceding discussion has shown that having a perception of something is a much more complex affair than having a simple idea of something (that is reflected in the mind). This is because a perception is to stand in a referential relation to a determinate object and therefore stands in need of a synthesis that brings the manifold of intuition to the objective unity of consciousness.

If Van Cleve contends that we have perceptual access to a determinate object’s determinations, but not the subject or the substrate that supports them, this amounts to founding his objection on a transcendently realist view of determinate objects and their determinations as something independent of our cognizing them. It is the same transcendental realism that supports the empiricist objection that the substrate of the accidents remains forever unknowable to us. But as we have seen, determinate objects and their determinations alike are the result of a categorially determining synthesis. Nothing in the manifold of

⁸⁴ Mr 29:770 (1782–83). See also MV 28:429: “But the accidents are not particular things that exist, rather only particular ways of considering existence;” and R5861, 18:371.

⁸⁵ R 6413, 18:708. It continues: “However, the reality of an *entis realissimi* is not a determination. But the existence of a thing is a synthetic predicate of our representation of things”.

⁸⁶ “[T]he confusion of the logical predicate with a real one (i.e., the determination of a thing) [...] Anything one likes can serve as a *logical predicate*, even the subject can be predicated of itself; for logic abstracts from every content. But the *determination* is a predicate, which goes beyond the concept of the subject and enlarges it.” A598/B626, original emphasis.

⁸⁷ A138/B177.

intuition can be represented *as* a determinate object or *as* a determination independently of this synthesis.

In claiming perceptual access to determinations, Van Cleve cannot abstract from the subjective conditions through which we come to perceive them as such. At least not if he wants to object to the perceptibility of substance within a Kantian framework. It appears that the determinations of a substance are no more directly perceptible than the substance itself. The imperceptibility of accidents apart from a subject in which they inhere is just as true as the imperceptibility of substance apart from its accidents. Rather, what is perceptible is an object that is positively determined and brought into unity by the substance–accident relation. This is how Kant is ready to respond to Locke and his hollow concept: substance as a possible object of cognition is not to be considered apart from its accidents since it is first through its accidents that a substance is positively determined as an object.⁸⁸ And as a determinate object it is not a “something, we do not know what”.⁸⁹

2.2.5 Substance, the substantial and substantiality

In the previous section, we have looked at Van Cleve’s claim that substance cannot be perceived, but only its determinations. We learnt that (Kantian) perception requires synthesis governed by the logical functions of judgment directed at intuition, and that one of these is the substance–accident relation. We furthermore learnt that this synthesis first renders a determinate object possible, and that the representation of determinations first becomes possible through this synthesis as well. Accordingly, determinations are not directly perceptible if taken in an “immediately met with in intuition” sense. Determinations are first perceptible as determinations of a determinate object or as accidents inhering in a subject. The upshot of this is that substance, as the subject *with* accidents, is an object of perception. Could the previous discussion, rather than confirming that substance cannot be perceived, prove that substance is perceptible after all?

Here we should pause for a moment and look at what Van Cleve is actually objecting to. In questioning the plausibility of the backdrop thesis, Guyer and Van Cleve attack the

⁸⁸ “Now if one ascribes a particular existence to this real in substance [...] then this existence is called ‘inherence’ in contrast to the existence of the substance, which is called ‘subsistence’. Yet many misinterpretations arise from this, and it is more precise and correct if one characterizes the accident only through the way in which the existence of a substance is positively determined.” A187/B230.

⁸⁹ “If any one should be asked, what is the subject wherein colour or weight inheres, he would have nothing to say, but the solid extended parts: and if he were demanded, what is it that that solidity and extension adhere in, he would not be in a much better case than the Indian before-mentioned, who, saying that the world was supported by a great elephant, was asked what the elephant rested on; to which his answer was, a great tortoise. But being again pressed to know what gave support to the broad-backed tortoise, replied, something, he knew not what.” Locke, *Essay*, Book II, Ch. 23, §2.

perceptibility of substance *as persistence*. The B-argument claims that it is the substrate in which everything real inheres that is to be encountered in the objects of perception; not an individual substance or a determinate object. As persistent substrate, substance *is* actually here considered apart from (or in the backdrop thesis: in contrast to) its accidents. The argument of the First Analogy is to prove substance as the persistence of the real. As the schema of substance, persistence is to function as “a rule for the determination of our intuition in accordance with a certain general concept”.⁹⁰ This means that persistence is not the resulting determinate object, but is rather a determinant of the determining activity. Persistence is the sensible condition under which substance in the substance–accident relation is to determine an object.

Could we here make use of a distinction which Kant himself makes between *the substantial* and *substance*, as signifying respectively, the sensible condition under which substance determines an object, i.e., persistence, and the perceptible, determinate object? “The determinable and the determinate: the substantial and the substance”.⁹¹ One instance, where Kant seems to reserve the concept of the substantial for “the concept of a subsisting object in general, insofar as one thinks in it merely the transcendental subject without any predicates”.⁹² Here it seems that the substantial is the mere logical subject, which will not suffice for our purposes. In other cases, Kant identifies the substantial with the *existing* subject as *considered in abstraction from* its accidents: “If we leave aside all accidents then substance remains, this is the pure subject in which everything inheres or the substantial”.⁹³ From a passage in the First Analogy it appears that substance considered in abstraction from its accidents is *persistence*:

Nevertheless, thanks to the conditions of the logical use of our understanding, it is still unavoidable for us to abstract out, as it were, that which can change in the existence of a substance while the substance remains, and to consider it in relation to what is really persistent and fundamental [...]⁹⁴

Could we then, after all, identify the substantial with substance as persistence? In the *Critique*, Kant in several places equates *substantiality* (*die Substantialität*) with persistence. He does this when talking of the empirical criterion of persistence in the First and Second

⁹⁰ A141/B180.

⁹¹ “Das Bestimbare und Bestimmte: das substantiale und die Substanz”, R5554, 18:229 (1778–83).

⁹² A414/B441.

⁹³ Also: “in relation to the first subject without any accidents, that is the substantial [...] [the relation] of the substance with its accidents to the substantial, i.e., the subject, which is distinguished from all *other* accidents.” Mr 29:770–71, original emphasis.

⁹⁴ A187/B230.

Analogies: “The empirical criterion of this necessary persistence and with it of the substantiality of appearances”.⁹⁵ Furthermore, in the First Paralogism of substantiality, Kant argues: “That I, as a thinking being, *endure* for myself, that naturally I *neither arise nor perish* – this I can by no means infer, and yet it is for that alone that the concept of *the substantiality* of my thinking subject can be useful to me”.⁹⁶ Again, substantiality is here equated with substance *as persistence*. I believe it is probable that Kant does not intend any essential difference between *das Substantiale* and *die Substantialität*, and that the quote which makes the substantial a mere logical subject, is less representative of what Kant actually means. I therefore propose that both *the substantial* and *substantiality* can be used to signify *the persistence* of substance, i.e., the sensible condition under which substance determines the content in sensible intuition. *Substance* should for the sake of clarity be reserved to signify the existing subject *with* accidents, i.e., the determinate object. Accordingly, it is the persistence of substance as substantiality and not the persistence of substance as determinate object that is argued for in the First Analogy.⁹⁷

We have seen that the backdrop thesis argues for the persistence of substance on the ground that substance must serve as a contrasting backdrop for the perception of change to be possible. We have also seen that Guyer unsuccessfully argues against the persistence of substance by reference to the transitory character of our representations. In the previous section, we accordingly evaluated Van Cleve’s claim that only the determinations of a substance and not the substance itself can be perceived. Whereas we learnt that a substance *with* its determinations is an object of perception qua determinate object, we also learnt that the determinations taken apart from the subject, in which they inhere, are not. By the same argument, the substantial considered apart from its determinations is not perceptible either, which means that substance as persistence is not an object of perception.

2.3 A LOGICAL FALLACY

If substance as persistence is not an object of perception, what other options are there? The longer passage from the First Analogy quoted above seems to support the idea that instead of perceiving the substance, we consider it in abstraction from, or in relation to, its determinations. This abstraction is “unavoidable to us” due to the logical use of the

⁹⁵ A188/B232, and “How will one infer directly from the action to the *persistence* of that which acts [...] on this account action, as a sufficient empirical criterion, proves substantiality”, A205/B251, original emphasis.

⁹⁶ A349, my italics.

⁹⁷ This would equal the absurd claim that individual substances as horses or pens are sempiternal entities.

understanding, which here points to the logical function of subject–predicate directed at objects of sensible intuition. Could substance perhaps be encountered in the application of the substance–accident relation as a rule for the determining synthesis? Or could it be encountered by inferring from the accidents to that which they inhere in? We will investigate the possibility of encountering substance in these ways in the subsequent chapter. For the present, I will take advantage of the newly acquired knowledge of the relation between determinate objects and the conditions of the determining synthesis to make a final objection to the backdrop thesis.

2.3.1 The backdrop thesis revisited

Let us return to the backdrop argument once more. Its internal inconsistencies, the implausibility of the backdrop thesis, and the consequent failure of the backdrop argument make Van Cleve discard the B-argument as a whole. In light of the previous evidence, one might be convinced that it is better to ignore it completely and rather focus on the body of the First Analogy, which proposes more promising arguments, like the alteration argument considered by itself. There is, however, an important aspect of the first part of the B-argument that is not as well reflected elsewhere in the First Analogy: the pure concept of substance is somehow to relate to objects of sensible intuition. It is, after all, the B-argument that provides us with the guiding question of how to interpret the claim that “it is in the objects of perception, i.e., the appearances, that the substratum must be encountered”.⁹⁸ Rather than concluding that the B-argument fails, I suggest that the reasons cited above first and foremost show that Allison’s construal of the B-argument, as a backdrop argument based on a backdrop thesis, is wrong. Consequently, it is not part one of the B-argument, but the interpretation of it as the backdrop thesis that should be discarded. There is an additional reason for believing so, and it stems from both architectonical and logical considerations.

In the following I propose that the backdrop thesis leads to inconsistencies in the overall argument of the Analogies when considered as a whole.⁹⁹ To begin with, there is little textual support for substance as a backdrop if we look to the subsequent Second and Third Analogies. The Second Analogy explicitly says that it builds its proof on the principle previously shown in the First Analogy that all change is alteration,¹⁰⁰ and the Third Analogy is concerned with the relation between substances as causal grounds of each other’s

⁹⁸ B225.

⁹⁹ That the backdrop thesis makes the Analogies inconsistent was first explored in Eggestad, «Persistence of substance and time-determination,». The arguments that I develop in the current thesis are original.

¹⁰⁰ B233.

determinations.¹⁰¹ The subsequent Analogies thus consider it a necessary condition for the determination of change and simultaneity of appearances that substance is the altering subject wherein successive determinations inhere. It is difficult to find a claim that the transcendental time-determination must take place as a perceptual contrasting between the substrate as a backdrop and the appearances that are to be temporally determined.

Secondly, and most importantly, I am worried that the backdrop thesis treats substance as an already temporally determinate object. To see this, remember that the backdrop thesis portrays substance as a perceptible, persisting backdrop in relation to which the arising and perishing of appearances can be perceived. What could such a backdrop be? Due to the transitory character of our representations, there are no persisting representations that could “stay in the background” while other representations pass. Perhaps we could compare the temporal content of our successive representations and identify some content as persistence and some other content as perishability? Indeed, this looks more promising, but it does not fit well with the notion of backdrop as an unchangeable background that is simultaneous with the changing appearances. Could this be remedied if the persistence-content were always to accompany the perishability-content? That is to say, could we, by comparing representations with content B+C, B+D, and B+E, perceive the change from C to D to E in contrast with the reappearing content B? But the reappearance of something in intuition does not guarantee its persistence, just as little as the accompaniment of the “I think” with every representation, guarantees the persistence of a thinking subject.¹⁰²

The delusion in the above arises from the attempt to read off determinate temporal relations in the content of empirical intuition. But in empirical intuition alone, no determinate temporal relations are given. This is precisely why transcendental time-determination is necessary. The problem really lies in the notion of a backdrop itself. As an unchangeable background that is simultaneous with the changing appearances, the notion of a backdrop already presupposes a temporally determinate relation between it and the appearances. But if this is the case, then the backdrop thesis presupposes the possibility of the determinate temporal relations of real succession and simultaneity. And this makes Kant guilty of presupposing the result of the Analogies in the very outset of the argument for the principle of the First Analogy.

¹⁰¹ B258 and A212/B259.

¹⁰² “Therefore one can, to be sure, perceive that this representation [the I] continually recurs with every thought, but not that it is a standing and abiding intuition, in which thoughts (as variable) would change.” A350.

We know from the previous discussion that it is only substance as determinate object and not substance as persistence that can be perceived. The intuitive appeal of the backdrop thesis is that it seems reasonable that for the perception of change to be possible, something unchanging has to be perceived in contrast with it. The backdrop thesis thus attempts to unite in the backdrop the properties of being *something (at least relatively) persistent* against which change can be contrasted, and *something perceptible*, which renders the perceptual contrasting between it and the changing appearances possible. We have seen that if the backdrop is to render the perception of change possible, it should be determinant of the determining activity that results in perception. That is, it should be the substantial. But as a backdrop that is perceptually contrastable with something else, it cannot be the substantial; rather, it has to be a determinate object. We have seen that the only way the categories can determine the sensible manifold is through their schemata, that is, through transcendental time-determination. This means that a determinate object is at the same time temporally determinate. Furthermore, we have in the above seen that the perceptual contrasting of the backdrop with other appearances is a contrasting of their different *temporal* properties. This already makes the backdrop temporally determinate, which again renders the overall argument of the Analogies viciously circular.

The backdrop is the perceptible object that is to condition perception and the temporally determinate object that is to condition temporal determination. The reading of the B-argument as a backdrop argument based on a backdrop thesis fails.

3 SUBSTANCE AS ALTERING SUBJECT

3.1 THE ALTERATION ARGUMENT REVISITED

We have seen that Allison in his discussion of the argument of the First Analogy refers to the alteration argument in support of part two of the backdrop argument: it is necessary that every change be conceived of as alteration (for the experience of change to be possible). Van Cleve objects to the alleged dependence of the alteration argument (part two), upon the backdrop thesis (part one), and we found his objection to be well founded. We further remember that Allison thinks the alteration argument by itself is insufficient to prove substance as persistence, i.e., that it alone can show the necessity of an altering subject, but not that this subject is persistent. Since Van Cleve takes the backdrop argument to be a failure, he believes the more promising argument for the principle of the First Analogy is an extended version of the alteration argument considered independently from the backdrop thesis. In contrast to Allison, Van Cleve argues that if the alteration argument is successful, the persistence of the altering subject can be shown to follow. I will call this “the alteration argument + p”.

3.1.1 The alteration argument + p

Why is it that Van Cleve believes the alteration argument can support the principle of the First Analogy? Allison frames his discussion of the First Analogy around the opening paragraph of the B-edition, which culminates in something very close to the B-edition principle: “In all change of appearances substance persists, and its quantum is neither increased nor diminished in nature.”¹⁰³ Van Cleve, on the other hand, takes the genuine principle of the First Analogy to be the principle as it is formulated in the A-edition: “All appearances contain that which persists (*substance*) as the object itself, and that which can change as its mere determination, i.e., a way in which the object exists.”¹⁰⁴ He bases this on the summary of the First Analogy that appears in the first paragraph of the Second Analogy in the B-edition:

That all appearances of the temporal sequence are collectively only *alterations*, i.e., a successive being and not-being of the determinations of the substance that persists there [...]

¹⁰³ B224.

¹⁰⁴ A182, original emphasis.

the previous principle has shown. This could also have been expressed thus: *All change (succession) of appearances is only alteration [...]*¹⁰⁵

Here, it appears that Kant himself takes the principle of the First Analogy to be that all change is alteration in a persistent subject, i.e., substance. He does not seem concerned with the further claim, in the B-edition principle, that the quantum of substance in nature remains. In the literature, Kant has been criticized for thus mixing the empirical investigation of matter with the metaphysical inquiry into substance. Aside from this, it may be argued that the A-edition formulation is better in that it makes the relation between the persistent, altering subject and its inherent, changing determinations explicit. Van Cleve therefore frames his discussion of substance around this principle.

Van Cleve gives a well-structured exposition of the most promising strategy for how the A-edition principle of the First Analogy could be defended.¹⁰⁶ First, he introduces a distinction borrowed from Bennett¹⁰⁷ between two senses of the concept of substance, where *substance₁* is an ultimate subject in which properties inhere, and *substance₂* is something that persists.¹⁰⁸ He then translates the A-edition principle to the following formula:

“For any x, if x changes, there is a y such that

(FA) (i) y is a substance, and

(ii) x's change is an alteration in (or of) y.”¹⁰⁹

That is, every change is an alteration of y, where y = the schematized category of substance = substance₁ + substance₂.

With these new tools at hand, we can now reformulate the different approaches to the argument of the First Analogy in Allison and Van Cleve: Allison believes the alteration argument can show that y is a substance₁, but not that it is a substance₂. That is, his alteration argument can support (FA) only if y = substance₁. Since Allison believes the alteration argument cannot show that the altering subject is persistent, his alteration argument comes short of proving the A-edition principle of the First Analogy. So even if Allison had discarded the backdrop thesis and opted for the A-edition principle as *the* principle of the First Analogy,

¹⁰⁵ B233, original emphasis.

¹⁰⁶ Van Cleve, *Problems from Kant*: 109–11.

¹⁰⁷ Jonathan Bennett, *Kant's analytic* (Cambridge; London: Cambridge U.P., 1966). 182.

¹⁰⁸ Van Cleve and Bennett define the terms a little differently, and I have here tried to unite these definitions into one: “A substance₁ is a thing which has qualities. A substance₂ is something which can be neither originated nor annihilated by any natural process, i.e., which is, barring miracles, sempiternal.” Jonathan Bennett, *Kant's analytic* (Cambridge; London: Cambridge U.P., 1966). 182. and “Following Bennett, I henceforth use ‘substance₁’ to mean something that exists only as subject and ‘substance₂’ to mean something that exists at all times.” Ibid.

¹⁰⁹ Van Cleve, *Problems from Kant*: 107. Van Cleve marks the principle “1A” and the derived principles: “1A’”, “1A’*”, etc., whereas I have chosen to mark them (FA), (FA*) and (FA**).

it would not be open to him to interpret the alteration argument as *the* argument of the First Analogy.

Van Cleve, on the other hand, argues that if one takes the alteration argument to be successful, it can be shown that y must be substance₂ as well as substance₁. To see this, he explains, start with granting the success of the alteration argument. It has then proved (FA) when $y = \text{substance}_1$:

For any x , if x changes, there is a y such that

(FA*) (i) y is a substance₁, and

(ii) x 's change is an alteration in (or of) y .

Now, suppose that we have y^* . y^* is a substance₁ and not a substance₂, i.e., y^* is not persistent. Since y^* is not persistent, at some time it will change. If we grant that (FA*) every change is an alteration in a substance₁, then y^* must inhere in, that is, be adjectival on, a substance₁ for its change to be possible. Since it is impossible that an ultimate subject is adjectival upon something else, y^* cannot be a substance₁ after all. By reduction, if (FA*) can be shown to be true, y must be substance in the sense of both substance₁ and substance₂, and thus we arrive at (FA). Consequently, if (FA*) is granted, the A-edition principle of the First Analogy has been proved. This is Van Cleve's alteration argument + p.

3.1.2 The anchoring argument

The question now becomes whether (FA*) – every change is an alteration of a substance₁ – can be argued for. If there is intuitive backing for the weaker claim that (FA**) all change is alteration *in something or other*, then (FA*) might be granted by reference to an anti-regress premise. That is, to avoid an infinite regress, a change would therefore ultimately have to be grounded or anchored in something that was not adjectival upon anything else. Since this simply *is* the definition of substance₁, we would get (FA*). Van Cleve calls this “the anchoring argument”. Can there be found any anti-regress claim in Kant in support of this argument?

Van Cleve quotes an argument from the Second Analogy to support the impossibility of such an infinite regress. I will call this argument “the argument from action”:

How will one infer directly from the action to the persistence of that which acts [...] For according to the principle of causality actions are always the primary ground of all change of

appearances, and therefore cannot lie in a subject that itself changes, since otherwise further actions and another subject, which determines this change, would be required.¹¹⁰

The argument says that the subject as ground of action must be unchanging, since if not, changing subjects would require other subjects and actions that could determine this change, and so on to infinity. Accordingly, it seems that Kant denies the possibility of such an infinite regress. In a passage in the Anticipations of Perception, we find a similar claim that the cause of an action does not itself change: “alterability concerns only certain determinations of appearances [...] while their cause is to be found in the unalterable.”¹¹¹ It thus appears that Kant opposes the idea of an infinite regress of acting subjects.

In support of the plausibility of the argument from action, I think it is important to notice that it is not the unconditioned nature of the *causal activity or action* that is defended. Among spatio-temporal appearances there is no unconditioned causality. This is explained in the resolution of the Third Antinomy in the Transcendental Dialectic:

Now since the *causality* of appearances rests on temporal conditions, and the preceding state, if it always existed, could not have produced any effect that first arose in time, the causality of the cause of what happens or arises has also *arisen*, and according to the principle of understanding it in turn needs a cause.¹¹²

This is also why the possibility of transcendental freedom as unconditioned causality within the empirical realm is not something that is evident, but must be proved.¹¹³

The principle of understanding that the passage above refers to is the principle of the Second Analogy, which in the A-edition reads: “Everything that happens (begins to be) presupposes something which it follows in accordance with a rule.”¹¹⁴ The conditioned nature of (empirical) causality is thus justified with reference to this principle: “that the causality of the cause, as *itself having happened* or arisen, must in turn have a cause”.¹¹⁵ The argument

¹¹⁰ A205/B250.

¹¹¹ A171/B213. Although this passage talks of “the alterability” (*Veränderlichkeit*) of determinations and of the cause as found in “the unalterable” (*in dem Unveränderlichen*) (KrV 3:155, 20–22) I believe Kant actually means to talk of “change” (*Wechsel*) and “the changeable” (*das Wandelbare*). The “correction of the concept of alteration” in A187/B230 makes clear that this is actually the case: “we can say, in an expression that seems somewhat paradoxical, that only that which persists (the substance) is altered, while that which is changeable does not suffer any alteration but rather a *change*”, original emphasis. More on this in the following.

¹¹² A532/B560, original emphasis.

¹¹³ In the *First Critique*, Kant only shows that transcendental freedom is not impossible, in that it is not incompatible with the causal series in the empirical world. This is because an intelligible cause will be exempt from the sensible conditions of time: “nature at least *does not conflict with* causality through freedom”, A558/B586, original emphasis. For a positive account of transcendental freedom as practical freedom, see the *Groundwork of the Metaphysics of Morals* (1785) and *Critique of Practical Reason* (1788).

¹¹⁴ A189/B232.

¹¹⁵ A533/B561, original emphasis.

from action is taken precisely from the Second Analogy. I therefore think it is evident that it does not claim the unconditioned nature of the causal activity, which would be to negate the principle it is to defend. The claim is rather that the conditioned, causal activity must be *grounded* or anchored in something that does not change. And this ground is a determining or acting subject.

The argument from action therefore reads: if the subject as ground of action were to undergo change itself, this would require another subject that could be the ground of the action of *that* change, and so on to infinity. This infinite regress is not possible. Therefore, the subject as ground of action is an unchanging subject, i.e., it is persistent.¹¹⁶

The argument from action claims that the infinite regress of subjects as grounds of action is impossible. Regardless of whether this argument is sound or not, I do not believe the anti-regress premise it presents can be of any help to our concern. To support the claim that (FA*) every change is alteration in substance₁, the impossibility of an infinite regress of *altering* subjects must be established. Van Cleve, however, cites an anti-regress claim in its support that refutes the possibility of an infinite regress of *acting* subjects. These regresses are importantly different, since the grounding relations of the subject and the determinations in play are different in kind. In the first case the regress moves from changing determinations *to that subject in which they inhere*, whereas in the second case the regress moves from changing determinations (in an altering subject) *to a different subject that is the ground* of this change. That is, the first regress consists of a chain of real relations of substance–accident, whereas the second consists of real relations of cause–effect.¹¹⁷ In using the anti-regress premise of acting subjects in support of an anchoring argument for altering subjects, Van Cleve seems to presuppose that the acting subject is identical to the altering subject.¹¹⁸

One way for the impossibility of the infinite regress of altering subjects to follow from the impossibility of the infinite regress of acting subjects, could be to argue that the passage from the Second Analogy reveals that Kant believes *all* grounding relations are ultimately

¹¹⁶ The metaphysical picture of change that is here outlined involves three elements: the ground or cause; the action or causal activity; and the change or that which happens.

¹¹⁷ Visually one may wish to depict the first regress as a vertical ladder and the second as a vertical zig-zag structure, both moving down into the abyss.

¹¹⁸ Van Cleve defines substance₁ as something that can exist only as a subject (see earlier note) and not as something in which properties inhere. Accordingly, both the altering subject *and* the acting subject satisfy his definition of substance₁, as neither of them can exist as anything else than a subject. However, it will not suffice to identify both the altering subject and the acting subject with a substance₁ in this sense as their common denominator, to make the anti-regress premise of the argument from action relevant for the anchoring argument. What we need is something that can unite an altering subject qua altering, with an acting subject qua acting, such that something which is in a grounding relation to determinations as altering subject, is also shown to be in a grounding relation to determinations as acting subject. That is, we need to unite the subjects through identifying both with a substance in the thick sense.

anchored in an ultimate subject. The subject that grounds action stops the regress, and so must the subject that grounds the determinations that inhere in it. This strategy may require that the grounding relation between an altering subject and its inherent properties, and the grounding relation between an acting subject and its causal activity, show a strong structural similarity.¹¹⁹

The other way would be to prove that the acting subject is an ultimate subject that takes properties i.e., a substance₁. Although Kant refers to the ground of action as a “determining subject”, he does not actually show that it is a subject in which determinations inhere. So this still needs to be proved. What would a proof for this look like? It is not immediately evident that there is any argument that can show that every acting subject must necessarily also be a subject that takes properties. The outcome of the argument from action is that the subject as ground of action is unchanging, and as unchanging subject it is a substance₂.¹²⁰ The most natural way to go about to identify the altering subject with the acting subject would accordingly be to identify both with substance in the thick sense, as substance₁ and substance₂.

However, this solution is not available to Van Cleve. The anti-regress claim in the argument from action is to support that (FA*) every change is an alteration in a substance₁. This is in turn to establish that (FA) every change is an alteration in a substance as substance₁ and substance₂. Substance in the thick sense is the *outcome* of the argument. We have seen that the most plausible way that the anti-regress claim from the argument from action can support (FA*), is to identify the acting subject with the altering subject. This is equal to identifying a substance₂ with a substance₁, i.e., we get *substance*. Accordingly, the anti-regress claim in the argument from action is valid as support of the anchoring argument only

¹¹⁹ In relation to understanding Kant’s theory of causality as a causal powers model, Watkins argues that “the substance–accident inherence relationship is structurally analogous to the relationship between a cause and its effects [...] a substance is an inner sufficient ground of its own accidents, whereas a cause is an outer ground of the accidents that are its effects.” Watkins, *Kant and the metaphysics of causality*: 261. He refers to a passage in *Metaphysik Herder*, where the possibility of mutual interaction is argued for, in support of his view: “If a substance suffers, then it must contain in itself by its own power the ground of the inherence of the accident, because otherwise the accident would not inhere in it. But the ground of this must also be in the efficient power of the substance, because otherwise it would not act [...] An accident thus inheres by its own power, which contains the sufficient inner ground of it.” MH 28:51–52, (1762–64). As will become clear soon, I do think Kant (at least in his critical period) takes there to be an important dissimilarity between the existence-relation in a substance–accident relation and the existence-relations in the causal relations of cause–effect and mutual interaction. This difference renders an asymmetry in the conditioning relation between the principles of the First, and the Second and Third Analogies, for their application. More on this later.

¹²⁰ Importantly, the opposite is not the case: substance₂ only signifies a subject that persists, and has broader extension than the concept of the subject as ground of action. The latter is a persistent subject, but in addition it is a determining ground of something, and this is not a qualification of substance₂.

if the substance₁ that is to function as an anchor in (FA*) is a substance in the thick sense. This, however, makes the alteration argument + p circular.

We must therefore conclude that the argument from action cannot provide any anti-regress premise in support of (FA*).

3.1.3 Substance as unconditioned

If the argument from action cannot provide the support we need, what other anti-regress claim can support that (FA*) every change is an alteration in a substance₁, having established that (FA**) every change is an alteration? What can support the subject of alteration as a necessary anchor? Although the anti-regress claim in the argument from action could not be used for our purposes, it might give a clue to how a subject in general can be seen to be an anchor in a grounding relation. From the passage from the Third Antinomy we have that both the action and the change that it produces are conditioned by antecedent determining activity. This means that there is a chain of conditioned causal activity and its effects that *actually regress*, if not infinitely, at least indefinitely.¹²¹ The interesting question to ask is why *this* regress is possible, when the regress of subjects as the grounds of this causal activity is not. In other words, what is it with the subject as ground of action that makes the regress of causal activity stop? Could the subject be unconditioned in some sense?

It is important to understand what an “unconditioned subject” could mean in the present context. The subject as ground of action cannot be sensibly unconditioned. It must still be conditioned by our forms of sensibility, i.e., it must still be *in time* (and space). This means that it cannot be an unconditioned subject in the sense of being independent of the possibility of experience. The same goes for substance₁ as the ultimate subject of alteration. It cannot be exempt from the sensible conditions of time although it is to function as an ultimate subject. This is exemplified by the antithesis in the Second Antinomy: the mathematical-transcendental idea of an ultimate subject that grounds all composition of the real, or the thesis of ultimate or simple parts of matter, is false.¹²² The resolution shows that the thesis of

¹²¹ Whereas the regress may be expected to have no boundaries, we are not entitled to know it to be infinite, only indefinite. This is because we are not given the whole series of conditions; rather, the regress first comes about empirically: “Now it does not follow at all that if the conditioned (in appearance) is given, then the synthesis constituting its empirical condition is thereby also given and presupposed; on the contrary, this synthesis takes place for the first time in the regress, and never without it.” A499/B527, and “if only one member of the series is given, from which the regress to an absolute totality is first of all to proceed, then only an indeterminate kind of regress (*in indefinitum*) takes place.” A512–13/B540–41.

¹²² The antithesis in the Second Antinomy argues that “No composite thing in the world consists of simple parts, and nowhere in it does there exist anything simple.” A435/B463, that it, against the notion of simple parts the antithesis argues that matter consists of infinite parts since space consists of infinite parts. In the resolution to the Second Antinomy, however, Kant shows that although space as a whole is given, the empirical division of space

the Second Antinomy builds on a transcendently realist assumption of substance as independent from the possibility of experience:

[Y]et it does not seem to be compatible with the concept of substance – which is really supposed to be the subject of all composition [...] that if all composition of matter were removed in thought, then nothing at all would remain. Yet with that which is called substance *in appearance* things are not as they would be with a thing in itself which one thought through pure concepts of the understanding. The former is not an absolute subject, but only a persisting image of sensibility, and it is nothing but intuition, in which nothing unconditioned is to be encountered anywhere.¹²³

On the contrary, the subject of the composition of the real is not unconditioned in the transcendental sense – it is not exempt from the sensible conditions of space and time, i.e., it is not an *absolute subject*. This must also be true of the subject as the ground of action and for the altering subject as an object of possible experience. The subjects can therefore not stop the regress by being ultimate subjects in this transcendental sense. Later in this chapter, we will have a look at what happens when substance is considered apart from its sensible condition or schema, and accordingly regarded as an absolute subject.

Perhaps the subject as ground of action could be unconditioned in an *empirical* sense; it could be unconditioned in its *existence*. The argument from action shows that this subject must be persistent. Accordingly, it could be empirically unconditioned in the sense that nothing in the appearances conditions it to begin to exist, and nothing in the appearances can condition it to cease to exist. Moreover, if the alteration argument + p succeeds, the altering subject too will be identified with a persistent subject, and as such substance, as the combination of substance₁ and substance₂, would be empirically unconditioned for its existence. Kant seems to say something like this in the First Analogy: “Hence we grant an appearance the name of substance only if we presuppose its existence at all time [...] the inner necessity of persisting is inseparably connected with *the necessity of always having existed*”.¹²⁴ Could it be that substance exists necessarily, and thus unconditionally?

On closer inspection, it appears that this cannot be what Kant means. In the resolution of the Fourth Antinomy he on the contrary says that “all things in the world of sense are

is not. So although the empirical regress within the boundaries of space will continue *in infinitum*, there can be no warrant to claim that that which fills space consists of infinite parts. The antithesis is false as well. A524–26/B552–54.

¹²³ A525/B553, original emphasis.

¹²⁴ A185/B228–29, my emphasis.

completely contingent, hence having always *only an empirically conditioned existence*”¹²⁵ and “everything in the world of sense has an empirically conditioned existence [...] there is no member of the series such that one does not always expect an empirical condition for it in a possible experience”.¹²⁶ Moreover, substance₂, substance₁ as altering subject, and the subject as ground of action, are all entities of the world of sense.

We see here that Kant links contingency with conditioned existence. For something to have an unconditioned existence, it must therefore exist *necessarily*. The Third Postulate establishes that in the empirical realm, it is only effects that can be cognized as existing by necessity. Importantly, it is made explicit that substances do not exist necessarily:

Hence we cognize only the necessity of effects in nature, the causes of which are given to us, and the mark of necessity in existence does not reach beyond the field of possible experience, and even in this it does not hold of the existence of things, as substances, since these can never be regarded as empirical effects, or as something that happens and arises. Necessity therefore concerns only the relations of appearances in accordance with the dynamical law of causality [...]¹²⁷

Here it looks as if the necessity of something is linked to its possible changeability – substances that do not arise and perish cannot be necessary such as the effects in nature. Somewhat paradoxically, it thus seems that only that which is conditioned can exist necessarily, and if this were true, substance would be unconditioned in its existence after all.

To explain these seeming absurdities, it is important to note that conditioned causality and change is not the same as conditioned existence.¹²⁸ That something that happens follows necessarily from its cause does not mean that this something is of a necessary existence, at least not in the real sense of “existence”. Granting for now that Kant is able to prove that every change is an alteration, the conditioned “happening” will consist of changing determinations in something in which they inhere. We remember from the previous chapter that determinations are particular ways for a substance to exist, or better, are ways in which

¹²⁵ A560/B588, my emphasis. One may wonder whether Kant is warranted in claiming knowledge of the modal properties of empirical existence as a whole and its possible transcendental grounds (e.g., that if there is a first cause it will be of necessary existence). The principles of modality are according to the Postulates restricted to an empirical use; A219/B266. It seems, however, that Kant takes “the principle of thoroughgoing contingency” in the world of sense to follow analytically from appearances being sensibly conditioned, see A563–64/B591–92.

¹²⁶ A561/B589.

¹²⁷ A227–28/B280. Also, just above this passage this line appears: “Thus it is not the existence of things (of substances) but of their state of which alone we can cognize the necessity”.

¹²⁸ “Now the conditions of what happens is called the cause, and the unconditioned causality of the cause in appearance is called freedom; the conditioned cause in the narrower sense, on the contrary, is called the natural cause. The conditioned in existence in general is called contingent, and the unconditioned necessary. The unconditioned necessity of *appearances* can be called natural necessity.” A419/B447.

the substance is positively determined.¹²⁹ This means that determinations or states of affairs do not have independent existences, but are alterations in the existing substances. That means that it is rather the particular determination or state of the substance that, if conditioned by a cause, is necessary, and not the substance's existence. Furthermore, Kant says that "everything in the sum total of appearances is alterable, hence conditioned in its existence."¹³⁰ There is therefore no doubt that altering substance is empirically *conditioned* in its existence.

What, then, could Kant mean by stating that persistence is inseparably connected with the necessity of always having existed? Again, it is important to keep distinct existence as such and determinations of existence in time. *That* substances exist, if they do, is a contingent fact; their existence is contingent as with anything in space-time. However, *if* they exist, they have the temporal determination of persistence, which signifies existence throughout all time. If substances exist, they have necessarily always existed.

I therefore suggest that substance as persistence can be said to be unconditioned with regard to its temporal determination or mode – it does not have anything that precedes or conditions it in time. This should not be mistaken to mean that it is sensibly unconditioned as with an absolute subject; it is still a phenomenon conditioned by the forms of sensibility. Furthermore, it does not imply the unconditioned existence of substance. Rather, as temporal entity, substance exists contingently. However, in relation to any other temporal determination, substance will be temporally prior in virtue of always having existed. That is, substance as persistence is *prior in time*. Perhaps this is what Kant means by describing substance as "the substratum of all time-determination"¹³¹ or that which "represents time in general",¹³² whose persistence is the "sole condition of the empirical unity of time".¹³³

That substance as persistence necessarily precedes any other temporal determination means that it precedes any other determinate way of existing in time. That substance is temporally prior to the existence of determinations in time does not, however, make it a condition of the *existence* of those determinations. For the coming to be and the ceasing to be of determinations, a determining ground and its causal activity are necessary as their condition. The subject as ground of action is such a condition. As we have seen, however, everything in the empirical world is contingent in its existence. The subject as ground of

¹²⁹ A187/B230.

¹³⁰ A560/B587.

¹³¹ A183/B226. Same place: "Without that which persists there is therefore no temporal relation." See also A188/B231.

¹³² B225.

¹³³ A188/B231.

action is thus not any less unconditioned in its existence than the changing determinations that it conditions.

From this we learn that neither the altering subject nor the acting subject can, as empirical objects, be unconditioned in the empirical sense. Furthermore, they cannot be unconditioned in the transcendental sense of being exempt from the sensible conditions of space and time. This would turn them into absolute subjects. I finally suggested that substance as persistence, i.e., substance₂, could perhaps be said to be unconditioned in the sense of being prior in time. It is the condition of every other temporal determination in virtue of always having existed. This temporal priority, however, will not be sufficient for an anti-regress claim that can support (FA*), that every change is an alteration in a substance₁. The latter is in need of an argument that shows that the infinite regress from determinations to that in which they inhere must be grounded in an ultimate subject of alteration. That this subject might be temporally prior to its determinations in the sense here outlined, is perhaps necessary, but certainly not sufficient to establish an anti-regress claim for the anchoring argument.

Earlier, we questioned whether an appeal to the subject as ground of action would actually be of any support of an anchoring argument for *altering* subjects, since these grounding relations are importantly different in structure. From the preceding discussion, moreover, it appears that it might prove difficult to base an anti-regress claim on the unconditioned nature of the altering subject. In what follows, I will explore a third possible variant of an anti-regress claim, which says that the altering subject is not a condition at all.

3.1.4 Substance as an anchor

The previous discussion has shown that the passage Van Cleve cites in support of an anchoring argument for altering subjects fails. We have seen that the temporal priority that substance as persistence has in relation to other temporal determinations alone does not imply that the substance is a condition of these determinations' existence. For this it is necessary that the substance stands in a determining relation to these determinations, i.e., that the substance is an acting subject. The only other way that substance as persistence can stand in a relation to determinations is through being an altering subject. Accordingly, it appears that the altering subject cannot be taken to be a condition of the existence of determinations. I propose that the existence-relation between substance, as altering subject, and its determinations can provide a clue to an independent argument in support of substance as an anchor.

In the passage that refutes the Lockean substrate in the First Analogy, it is said to be misleading to describe the existence of substance as separate or independent from the existence of its determinations, and vice versa:

Now if one ascribes a particular existence to this real in substance (e.g., motion, as an accident of matter), then this existence is called “inherence”, in contrast to the existence of the substance, which is called “subsistence”. Yet many misinterpretations arise from this, and it is more precise and correct if one characterizes the accident only through the way in which the existence of a substance is positively determined.¹³⁴

The existence-relation between a substance and its determinations or accidents is accordingly not between different existing entities, but rather between an existing substance and the different ways its existence may manifest itself. The existence-relations between a cause and its effect in the Second Analogy, and between reciprocally determining causes in the Third Analogy, on the other hand, are existence-relations between *different* existing substances and their determinations.¹³⁵ The Second and Third Analogies presuppose that there is an existence-relation between substances and its determinations, an existence-relation that does not prevail between different existing entities. Kant continues the cited passage above: “thus this category [substance–accident] also stands under the title of relations, but more as their [the existence-relations’] condition than as itself containing a relation.”¹³⁶

That the substance–accident relation is a special kind of existence-relation has an interesting consequence:

[T]he category of substance and its accidents is not suited to a transcendental idea, i.e., in regard to this category reason has no ground to proceed regressively toward conditions. For accidents (insofar as they inhere in a single substance) are coordinated with one another, and do not constitute a series. In regard to substance, however, they are not really subordinated to it, but are rather the way substance itself exists.¹³⁷

Since accidents are merely the different ways a substance exists, they are not subordinated to substance in the way that that which is conditioned for its existence is subordinated to its

¹³⁴ A186–87/B230. Also: “This persistence is therefore nothing more than the way we represent the existence of things (in appearance).” A186/B229.

¹³⁵ There is disagreement about what the relata are in the Second and Third Analogies; whether the cause is a determinate event, or a substance grounding an indeterminate causal power. Watkins is a proponent of the latter: “A ground that determines the state of another substance does not do so by virtue of a determinate state of its own or by means of its mere existence, but rather through an indeterminate activity that is incapable of ever becoming determinate.” Watkins, *Kant and the metaphysics of causality*: 231. For a discussion of the plausibility of the metaphysical indeterminacy of causality, see Andrew; Chignell and Derk Pereboom, «Kant's theory of causation and its Eighteenth-century German background,» *Philosophical Review* 119, no. 4 (2010).

¹³⁶ A187/B230, inserted square brackets.

¹³⁷ A414/B441.

condition. A substance is not the condition of the existence of its accidents. Kant concludes from this that the substance–accident relation is not suited to a transcendental idea, since from this *there is no ground for reason to proceed regressively toward conditions*.

Van Cleve was looking for an argument to stop an infinite regress of altering subjects. Nothing in what has been said above depends on the existing entity being absolutely persistent. A relatively existing being will, if being a subject in which something alters, be an existing entity in which its determinations are only different ways for it to exist. That means that “substance” in the quote above can be substituted with “altering subject”, and that an altering subject should not be considered as a condition of its determinations. Accordingly, any altering subject stops the infinite regress before it ever gets started – an altering subject is already an *ultimate* subject of alteration, a substance₁. The realization that a substance is not a condition of the existence of its determinations has provided the anchoring argument we need.

3.2 THE POSSIBILITY OF THE EXPERIENCE OF CHANGE

In the preceding we have seen that the reference to the passage in the Second Analogy in support of an anchoring argument for (FA*) failed. I then argued that independent support for substance₁ as an anchor could be found in the claim that substance as altering subject is not an existence-condition for its determinations. In order to prove (FA*), it thus remains to be seen whether (FA**), every change is an alteration *in something or other*, can be defended. This is where the alteration argument + p may provide the answer to how substance is to be encountered in the objects of perception.

In what follows we will evaluate three different arguments that purport to prove that (FA**) every change is an alteration in something or other. The three arguments will all argue that (FA**) is true on the ground that it is necessary for the possibility of experiencing change. The arguments differ, however, in what they understand the experience of change to be. We will see that the different ways of understanding this determines alternative ways in which the substance as the subject of alteration can be accessed epistemically, and thus how substance can be encountered in the objects of perception.

3.2.1 The meaning of *change*

Before venturing at the arguments that are to defend (FA**) every change is an alteration in something or other, it is necessary to examine what “change” (*Wechsel*) actually means in Kant. There are different interpretations of this. What is indisputable is that Kant takes change to be something that concerns the states or determinations of a substance, and not the

substance itself: “this change concerns only the determinations that can cease or begin”.¹³⁸ In contrast, alteration (*Veränderlichkeit*) “is a way of existing that succeeds another way of existing of the very same object.”¹³⁹ If (FA**), every change is an alteration in something, can be shown to be true, then these are related such that “everything that is altered is *lasting*, and only its *state changes*.”¹⁴⁰

The disagreement concerns whether one takes “change” to signify: (i) the successive being and non-being (or vice versa) of one state of affairs, or whether it signifies (ii) the successive being of one state of affairs upon another. In (ii), the succeeding state implies the going out of existence of the preceding state and the preceding state implies the non-existence of the succeeding state. In other words, the existence of x is incompatible with the existence of y. We can express these different interpretations of change as:

- (i) x to non-x (or vice versa).
- (ii) x to y, where x implies non-y and y implies non-x.

These alternative interpretations might appear to be identical, but there is an important difference in that y signifies an existing state, whereas non-x signifies the non-existence of a state. Although y implies non-x it is also something more than just non-x – it is a positive (other) state of affairs.¹⁴¹

Proponents of the interpretation of change in (i) are Melnick¹⁴², Van Cleve¹⁴³ and Bennett: “Kant distinguishes a thing’s *existence-change*, in which it goes out of or comes into existence, from its *alteration*. His word for the former is *Wechsel*”.¹⁴⁴ Some proponents of change as defined in (ii) are Longuenesse¹⁴⁵, Guyer¹⁴⁶, and Allison: “*ein Wechsel* is the kind

¹³⁸ A187/B230.

¹³⁹ A187/B230. Also: “all existence and all change in time can only be regarded as a *modus* of the existence of that which lasts and persists.” A183/B227.

¹⁴⁰ A187/B230, original emphasis. Also: “in all appearances that which persists is the object itself, i.e., the substance (*phaenomonon*), but everything that changes or that can change belongs only to the way in which this substance or substances exists, thus to their determinations.” A183–84/B227. For a discussion of a possible argument for substance from the analysis of the concepts of alteration and change, see earlier note in the previous chapter.

¹⁴¹ I will in the following discuss the definitions of change by referring to x and y as states of affairs rather than determinations, since otherwise, the definition of change would presuppose the outcome of the argument for (FA) that every change just is the altering determinations in a substance.

¹⁴² “[T]o conceptualize states of affairs as states of substance enables us to ascertain empirically when a state of affairs comes to be [...] to be determinable empirically that a state of affairs S₁ went out of existence at time t”, Melnick, *Kant’s analogies of experience*: 73–74.

¹⁴³ “[A] change in a representation is its coming into being or going out of being”, Van Cleve, *Problems from Kant*: 53.

¹⁴⁴ Bennett, *Kant’s analytic*: 187.

¹⁴⁵ “[C]hange (*Wechsel*, disappearance of a sensible determination and appearance of its opposite)”, Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason*: 329.

of change in which one item is replaced by another. Accordingly, it will here be characterized as a ‘replacement change’.¹⁴⁷ I will hence use “existence-change” and “replacement-change” for (i) and (ii), respectively.

Kant says things that speak in favor of both of these interpretations of change. In support of (i), we have: “That all appearances of the temporal sequence are collectively only *alterations*, i.e., *a successive being and not-being* of the determinations of the substance that persists there”,¹⁴⁸ and “that which is changeable does not suffer any alteration but rather a *change*, since some determinations *cease and others begin*”.¹⁴⁹ In addition there are numerous passages where Kant contrasts the impossibility of the *arising and perishing* of substances to the possibility of change as alteration. For this contrasting to make sense, it is reasonable to think that change must be the existence-change of the determinations in a substance, i.e., to think:

[T]hat the being of a substance itself, which succeeds its not-being, or its not-being, which succeeds its being, in other words, that the arising or perishing of the substance does not occur [...] could also have been expressed thus: *All change (succession) of appearances is only alteration* [...]¹⁵⁰

In support of (ii), we have: “the concept of alteration presupposes one and the same subject as existing with *two opposed determinations*”,¹⁵¹ “Every apprehension of an occurrence is therefore a perception that follows another one”,¹⁵² and the many passages in the Second Analogy where the objective sequence is contrasted with the subjective one: “I would therefore not say that in appearance two states follow one another, but rather only that one apprehension follows the other, which is something merely subjective”.¹⁵³

Finally, there is a passage where Kant seems to treat (i) and (ii) as expressing the same occurrence: “for it is this very thing that persists that makes possible the representation of the transition *from one state into another, and from non-being into being*”.¹⁵⁴ It will prove helpful to have the difference between these interpretations in mind when we now move on to consider the arguments for (FA**), that every change is an alteration in something or other.

¹⁴⁶ “[A] change in general, which might involve the substitution of one state of affairs for another”, Guyer, *Kant and the claims of knowledge*: 222.

¹⁴⁷ Allison, *Kants transcendental idealism: An interpretation and defense*: 240.

¹⁴⁸ B232, original emphasis, my italics.

¹⁴⁹ A187/B231, original emphasis, my italics.

¹⁵⁰ B233, original emphasis.

¹⁵¹ B233.

¹⁵² A192/B237.

¹⁵³ A194–95/B240.

¹⁵⁴ A188/B231.

3.3 THE ARGUMENT FROM VERIFIABILITY

Let us first have a look at an argument from empirical verifiability. Van Cleve¹⁵⁵ discusses Dryer's¹⁵⁶ and Melnick's¹⁵⁷ versions of this argument. I will here discuss the one presented by Guyer¹⁵⁸ and stay with this argument for a while, since I believe it provides some good points for reflection. To start with the conclusion, common to all these interpreters is that they take the alteration argument as providing a method for empirically verifying, or have evidence, that there is change:

Kant now argues that knowledge of *alteration in an enduring substance*, *a fortiori* knowledge of the existence of enduring substance, is itself the necessary condition for knowledge of any change at all. Only by treating any putative case of *change* as an *alteration* in the states of a continuing substance can we have evidence for the occurrence of any form of change, or, in terms suggested by Arthur Melnick, can change become “empirically verifiable”.¹⁵⁹

According to these interpreters, “the experience of change” that is rendered possible is the empirically verifiable knowledge of change. In which way does the argument for (FA**) that every change is alteration, proceed to establish the empirical verifiability of change? Guyer bases his argument from verifiability on the same passage that Allison took in support of his alteration argument in the previous chapter. For convenience, I here quote the passage anew and add some lines in its continuation:

Alteration can therefore be perceived only in substances, and arising or perishing per se cannot be a possible perception unless it concerns merely a determination of that which persists, for it is this very thing that persists that makes possible the representation of the transition from one state to another, and from non-being into being, which can therefore be empirically cognized only as changing determinations of that which lasts. If you assume that something simply began to be, then you would have a point in time in which it did not exist. But what would you attach this to, if not to that which already exists? For an empty time that would precede is not an object of perception; but if you connect this origination to things that

¹⁵⁵ Van Cleve, *Problems from Kant*: 111–13.

¹⁵⁶ D. P. Dryer, *Kant's solution for verification in metaphysics* (London: Allen and Unwin, 1966). 353.

¹⁵⁷ Melnick, *Kant's analogies of experience*: 75.

¹⁵⁸ Guyer, *Kant and the claims of knowledge*: 224–29. Guyer's set-up of the argument is similar to Melnick's, but in contrast to him, Guyer does not put any emphasis on the role of space in the rule that is to connect the states of affairs as determinations in a subject.

¹⁵⁹ *Ibid.*, 224. Original emphasis.

existed antecedently and which endure until that which arises, then the latter would be only a determination of the former, as that which persists.¹⁶⁰

Guyer takes the argument to proceed in three steps:

- 1) Direct perception of the absence of a given state of affairs is impossible.
- 2) The mere succession in representations does not provide sufficient evidence that an objective change has occurred, since our representations are always successive. This can only be the case if there is some incompatibility between the states of affairs, such that the subsequent state can only be perceived if the preceding state does not exist any longer.
- 3) Accordingly, there must be a rule that allows us to infer an objective succession from the succession of representations. This rule must be on a form, which entails that x , which is S at t_1 , cannot also be S' at t_1 , but rather only at t_0 or t_2 . We observe that this rule requires that we postulate an object, x , which endures while S and S' succeed in it. Consequently, the postulation of substance as the enduring object, x , of which the successive representations are determinations, is a necessary condition for the possibility of inferring objective change.¹⁶¹

We will now look at these steps in turn. The first step claims that it is impossible to perceive the absence of reality, or non-being per se. That this is impossible is repeated throughout the *Critique*: “the entire absence of the real in sensible intuition cannot itself be perceived”.¹⁶² Moreover, without anything real to fill time and space, these forms of sensibility are empty of sensible content and thus imperceptible too: “Negation as well as the mere form of intuition are, without something real, not objects.”¹⁶³ We remember from the previous chapter that it is precisely because of the imperceptibility of time in itself that the backdrop thesis argues for substance as its perceptible substitute.¹⁶⁴

What does this have to say for the possibility of experiencing change? If change is interpreted in the sense of existence-change, as the coming to be or the ceasing to be of a state

¹⁶⁰ A188/B231. A passage almost identical to the latter part of this passage is found in the Second Analogy: “That something happens, i.e., that something or a state comes to be that previously was not, cannot be empirically perceived except where an appearance precedes that does not contain this state in itself; for a reality that would follow on an empty time, thus an arising not preceded by any state of things, can be apprehended just as little as empty time itself.” A191–92/B236–37.

¹⁶¹ Guyer, *Kant and the claims of knowledge*: 224.

¹⁶² A172/B214.

¹⁶³ A292/B349. The passage occurs in the discussion of the concept of nothing: “The *nihil privativum* (No. 2) and the *ens imaginarium* (No. 3), on the contrary, are empty *data* for concepts. If light were not given to the senses, then one would also not be able to represent darkness, and if extended beings were not perceived, one would not be able to represent space.” A292/B349.

¹⁶⁴ Cf. “Now time cannot be perceived by itself.” B225.

of affairs, x, then the impossibility of directly perceiving non-x implies the impossibility of directly perceiving change. As Kant says in the passage above: “then you would have a point in time in which it [x] did not exist. But what would you attach this to [...]?”¹⁶⁵ Van Cleve interprets the problem of perceiving existence-change as the problem of having knowledge of a negative empirical proposition. He cites a view that claims that such knowledge can be had “only via inference from a positive proposition (e.g., that this is red) together with a principle of incompatibility (e.g., that whatever is red is not green).”¹⁶⁶

Direct perception of the absence of the real, or what is said to be the same, knowledge of negative propositions, is shown to be impossible. Accordingly, we are constrained to derive the knowledge of what is absent from our knowledge of what is present.¹⁶⁷ This takes us to step 2) in Guyer’s argument. We are presented with the real through our successive representations. Since our representations always succeed one another, a point Kant continuously recurs to,¹⁶⁸ we are not guaranteed that a succession of representations, x and y, is an *objective* succession, i.e., that it implies the existence-changes of x to non-x and non-y to y. For the proponents of change as replacement-change, this is the problem of experiencing change. It is not the problem of perceiving change, since this is the succession of two perceptible states of affairs, x and y. The problem is rather to represent this perceptible succession as objective. For this to be possible, it must be shown that the appearance of y is incompatible with the continued existence of x. That is, we must somehow be able to know that the succession of the appearances x and y signifies a succession in the *existence* of that which they represent.

3.3.1 An alternative definition of *change*

This brings us to the third step in Guyer’s argument. Guyer here proposes that there must be a rule which can license the inference from the appearance of S’ to the non-existence of S. What kind of rule can this be? Guyer states that the logical principle of contradiction will be

¹⁶⁵ A188/B231. The argument for the antithesis in the First Antinomy of Pure Reason in like manner argues from the impossibility of perceiving empty time to the impossibility of the world having a (perceptible) beginning: “But now no arising of any sort of thing is possible in an empty time, because no part of such a time has, in itself, any distinguishing condition of its [the thing’s] existence rather than its non-existence” A427/B455.

¹⁶⁶ Van Cleve, *Problems from Kant*: 112. Also: “To know by perception that an item has come into being, we must know that at an earlier time it did not exist. That is, we must have knowledge of a negative empirical proposition.”

¹⁶⁷ “[N]egations are merely determinations that express the non-being of something in the substance”, A186/229.

¹⁶⁸ See e.g., A189/B234: “The apprehension of the manifold of appearance is always successive. The representations of the parts succeed one another. Whether they also succeed in the object is a second point for reflection, which is not contained in the first.” Also: A182/B225, A192/B237, A198/B243, and A201/B246.

insufficient for the task.¹⁶⁹ There is, however, another formula of the principle of contradiction, which provides a clue to the rule we need: “A thing = *A*, which is something = *B*, cannot at the same time be *non-B*, although it can easily be both (*B* as well as *non-B*) in succession.”¹⁷⁰ Kant explains that this formula has the appearance of being a general logical principle, but that in restricting its domain to what is temporal, it actually purports to say something about objects of experience, i.e., it is a synthetic proposition.¹⁷¹ What makes the proposition synthetic is the way the predicates *B* and *non-B* are predicated of the subject *synthetically*.¹⁷²

In her discussion on the different ways of predicating in Kant, Longuenesse quotes a reflection from the Duisburgscher Nachlaß, presenting synthetic predication: “The synthetic validity of *b* and *non-b* with respect to the *x* that can be thought by concept *a* and not-*a* is called change (*Wechsel*).”¹⁷³ Accordingly, the temporal formula of the principle of contradiction furnishes us with an alternative definition of the concept of change, as “the synthetic validity of contradictory predicates with respect to an object”. “Synthetic validity” can be translated with that which can be valid of an object considered *in time*. Contradictory predicates, as *b* and *non-b*, can be valid of an object only when they are predicated *in succession*.¹⁷⁴

The former definition of change can hence be paraphrased to “the validity of contradictory predicates with respect to an object, when predicated in succession”.¹⁷⁵ We recognize this as the form of the rule in step 3), the application of which Guyer takes to be necessary for the possibility of the experience of change. This definition of change clarifies

¹⁶⁹ The principle of contradiction reads: “no predicate pertains to a thing that contradicts it”, A151/B190. Its inadequacy to determine the incompatibility of the co-existence of *x* and *y*, is due to it being inadequate to ground existence-propositions as such, since they are synthetic in kind. “For that no cognition can be opposed to it without annihilating itself certainly makes this principle into a *conditio sine qua non*, but not into a determining ground of the truth of our cognition.” A151–52/B191.

¹⁷⁰ A152/B192.

¹⁷¹ “The misunderstanding results merely from our first abstracting a predicate of a thing from its concept and subsequently connecting its opposite with this predicate, which never yields a contradiction with the subject, but only with the predicate that is combined with it synthetically, and indeed only when both the first and the second predicate are affirmed at the same time.” A153/B192.

¹⁷² That is, they do not follow from the subject-concept *A* analytically, as “divisible” follows analytically from “body” in “All bodies are divisible”; they are only *contingent* marks of the subject-concept. Accordingly, the proposition only amounts to a contradiction when the predicates are united in a subject *at the same time*.

¹⁷³ “Die synthetische gültigkeit von *b* und *non b* in Ansehung des *x*, welches durch den Begriff *a* oder *non a* gedacht werden kann, heißt wechsel.” R4676, 17:654 (1773–75) in Van Cleve, *Problems from Kant*: 112.

¹⁷⁴ Kant’s own example is a man, which can be unlearned and learned in succession, but not at the same time.

¹⁷⁵ Change thereof differs from what Kant calls “real contradiction”, which is the simultaneity of real predicates in a body that do not logically contradict each other, but rather oppose each other due to their spatial orientation: “The motive force of a body in one direction and an equal tendency of the same body in the opposite direction do not contradict each other; as predicates, they are simultaneously possible in one body [...] the two tendencies are true predicates of one and the self-same thing, and they belong to it simultaneously”, NM 2:171–72 (1763).

that there are two necessary conditions for something to be a change: (i) the incompatibility of certain predicates or states of affairs, and (ii) the synthetic validity of these predicates with respect to an object. We will employ this to figure out what principles from step 3) Guyer requires as necessary conditions for the empirical knowledge of change.

Let us use Kant's own example in the First Analogy with the wood that is combusted into ashes and smoke.¹⁷⁶ If it had been possible to perceive the absence of wood, then this would have been sufficient to establish the first requirement of change (i) as comprising incompatible states of affairs.¹⁷⁷ This is, however, not possible, as is made clear in step 2). Rather, we are presented perceptually with succeeding representations of wood and ashes, and from this succession it is not possible to derive that the wood and ashes succeed each other with necessity, i.e., that they cannot be coexisting states of affairs. This is only possible by representing the ashes as succeeding the wood *in accordance with a necessary rule*. We do this by representing the ashes as the effect of a cause that determines the wood to become ashes. Consequently, the experience of a necessary succession of representations or incompatible states of affairs, is possible only through the application of the relational concept of cause–effect of the Second Analogy.¹⁷⁸

However, the definition of change tells us that change does not only consist of the incompatibility of certain predicates, but (ii) these predicates' synthetic validity with respect to an object. For the representations of wood and ashes to imply each other's non-existence they must be properties *of the same thing*. The reason for this is the impossibility of experiencing the absence of the real as outlined in step 1). Our representations do not present us with contradictory states of affairs per se, as would be the case if we could perceive wood and thereafter the absence of wood. In contrast, wood and ashes can certainly co-exist as such, as they do right now in the fireplace in my living room.¹⁷⁹ Thus, a minimum requirement for experiencing the incompatible existence of that which our representations present us with is to refer these representations to one common subject as this subject's determinations. This is only possible by thinking the wood and ashes as ways of existing of something that is more

¹⁷⁶ A185/B228.

¹⁷⁷ Or to be precise, that, together with an anti-skepticism argument that our representations present what is objectively "out there". Kant does not as easily fall prey to skeptical arguments since his perception-theory is not a mere copy-theory. See section on perception and determinate objects.

¹⁷⁸ The A-edition principle: "Everything that happens (begins to be) presupposes something which it follows in accordance with a rule." A189, and the B-edition principle: "All alterations occur in accordance with the law of the connection of cause and effect." B232.

¹⁷⁹ Guyer also makes this point: "the rule cannot be of the broad form, 'S and S' cannot coexist *tout court*", Guyer, *Kant and the claims of knowledge*: 227.

persistent and common to both of them (e.g. matter). Accordingly, the experience of incompatible states of affairs is also conditioned by the application of the relational concept of substance–accident of the First Analogy.

3.3.2 From subjective to objective succession

This takes us to what Guyer believes is the outcome of the joint effort of the principles of the First and Second Analogies. According to him, they license an inference from the perception of our subjective successions to empirical knowledge of objective change: “Only then can inference be made that the successive occurrence of S- and S’-like representations represents an objective change from S to S’.”¹⁸⁰

However, it is less than certain that Kant thinks that we *first* have a subjective time-order that we *then* determine according to a certain rule,¹⁸¹ that is, that we constantly correct our perceptual experience so that it can have objective validity. This has little intuitive appeal, and more importantly, it would make objective experience derivative on a more fundamental subjective one. This doesn’t seem to square well with the argument of the Deduction, which argues for necessary conditions for the possibility of perceptual experience,¹⁸² nor with the Refutation of Idealism, where outer experience is argued to be more immediate than inner experience.¹⁸³ I believe Kant rather argues that if perceptual experience as such is to be possible, then it must be conditioned by rules through which it first attains objective validity. This makes the objective experience and time-order the fundamental and transparent one, and the subjective time-order the derivative one, as something that we can empirically reach by a special act of attention to the order in which we observe things.

Let us have a look at Kant’s famous example of the ship that is driven downstream. Kant here comments that it is “impossible that in the apprehension of this appearance the ship should first be perceived downstream and afterwards upstream. The order in the sequence of the perceptions in apprehension is therefore here determined, and the apprehension is bound to it.”¹⁸⁴ The interpretation that the objective sequence is derived through determining an already present subjective sequence is made difficult by this passage, and even more, it seems to be directly refuted in the lines following it: “I must therefore derive the *subjective sequence*

¹⁸⁰ Guyer, *Kant and the claims of knowledge*: 227.

¹⁸¹ With “first” and “then” I do not mean that which is *temporally* prior and posterior, but rather that which is prior and posterior in the *transcendental sense*, as that which is the condition of possibility of the latter.

¹⁸² See e.g. the B-edition Deduction: “Consequently all synthesis, through which even perception itself becomes possible, stands under the categories” B161.

¹⁸³ “Yet here it is proved that outer experience is really immediate, that only by means of it is possible not, to be sure, the consciousness of our own existence, but its determination in time, i.e., inner experience.” B277.

¹⁸⁴ A192/B237.

of apprehension from the *objective sequence* of appearances”.¹⁸⁵ The textual evidence seems to underpin the interpretation that I favor, where the objective time-order is the fundamental and transparent one. In his discussion of the Second Analogy, Allison says things that could lead one to believe he agrees with Guyer on the way the objective order is determined from the subjective one. A closer look at what Allison says in regard to the transcendental setting of the Analogies debunks this, and sums up my point succinctly:

The subjective order is not a datum on the basis of which the mind must somehow infer or construct an objective order. It is rather what would remain if (*per impossibile*) we could remove the indeterminate structure imposed on the sensibly given (the manifold of inner sense) by the understanding.¹⁸⁶

3.3.3 Van Cleve's objection

The argument from empirical verifiability was presented as one argumentative strategy to prove that (FA**) every change is an alteration in something or other. Van Cleve is not satisfied with the argument from empirical verifiability. Remember that Van Cleve has an ontological interpretation of what the alteration argument is to prove, that is, it is to show that (VC) it is necessary that every change is an alteration in a substance for the experience of change to be possible. According to Van Cleve, the biggest drawback with the argument from empirical verifiability is that it argues for substance as subject of alteration as a necessary condition for *perceiving* or *verifying* change. He continues: “To show this would be to show that all perceived or verified changes are alterations. [...] But are there not unperceived changes, for example, changes that occurred in the remote past or in quantum particles too tiny to see?”¹⁸⁷ Van Cleve hence takes the outcome of the argument from verifiability to be too weak to establish that (FA**) every change is alteration, which is necessary to prove the principle of the First Analogy, (FA).

This, however, is not a successful objection to the argument from verifiability. The objection is that there could be unperceived changes that could be absolute existence-changes for all we knew, and as such would refute (FA) every change is an alteration in a substance. However, substance as altering subject is not a necessary condition for the actual, but rather the *possible* perception of change. As the Postulates of Empirical Thinking make clear, possible perceptions are connected with actual perceptions in accordance with, precisely, the Analogies, as rules for the real connection of objects of *possible* experience. Both the changes

¹⁸⁵ A193/B238, original emphasis.

¹⁸⁶ Allison, *Kant's transcendental idealism: An interpretation and defense*: 231.

¹⁸⁷ Van Cleve, *Problems from Kant*: 113.

that occurred in the remote past and quantum particles too tiny to see are connected with our actual perceptions in a chain of existence-relations governed by the principles of the Analogies, and as such, they are possible perceptions to us.¹⁸⁸

Van Cleve's objection to the argument from verifiability is unsuccessful, but it is interesting for a different reason. In his discussion of the Second Analogy, Van Cleve presents a parallel objection to the one above, this time directed at Kant's argumentative strategy to prove that (a) every event has a cause. According to Van Cleve, Kant tries to prove (a) by proving: "(b) that we can *know* that an event has occurred only if we know (or would be correct in thinking) that it had a cause."¹⁸⁹ Van Cleve objects that (b) is not sufficient to provide (a), since "there are *phenomenal events* of which we have no knowledge".¹⁹⁰ We recognize this as a version of the objection above. However, this time he takes a step further and suggests that perhaps "every phenomenal event, if not known, is at least *knowable*".¹⁹¹ By showing that for an occurrence to be knowable it is necessary to presuppose its cause, it has thus been shown that every knowable event has a cause. Van Cleve, however, does not think this solves the issue for the reason that there may be phenomenal events that are not knowable, since "witnessing an event is not always sufficient to know that an event has occurred. So there does not seem to be any guarantee that all phenomenal events are knowable."¹⁹²

3.3.4 Sufficient conditions for knowledge

What is interesting with this objection of Van Cleve's is the mention of lack of sufficient conditions for knowledge. As he says, witnessing, or observing, is not always enough to have this knowledge. What he should be saying, is rather that witnessing is *never* sufficient to know that an event has occurred. This is what is stated in step 2) of Guyer's set-up of the argument from verifiability: our successive representations are not sufficient to infer that an objective succession has occurred, since our representations are *always* successive. Mere representation without any employment of categorial functions will therefore never be

¹⁸⁸ That there may be empirical conditions (such as the constitution of our sense organs, or our situation in time) that prevent us from having an actual perception of quantum particles, or events in the remote past, does not pose a problem – these are still objects of possible experience in a transcendental sense: "Thus we cognize the existence of a magnetic matter penetrating all bodies from the perception of attracted iron filings, although an immediate perception of this matter is impossible for us given the constitution of our organs [...] Thus wherever perception and whatever is appended to it in accordance with empirical laws reaches, there too reaches our cognition of the existence of things." A226/B273.

¹⁸⁹ Van Cleve, *Problems from Kant*: 132.

¹⁹⁰ Ibid., 133. Original emphasis.

¹⁹¹ Ibid.

¹⁹² Ibid.

sufficient to know that there is a change in the objects. I have, however, questioned whether this insufficiency should be interpreted in the sense that we actually are presented with a subjective succession of representations, and that the application of the relational categories is to license the inference that makes it legitimate to move from this subjective succession to an objective one. I refer to the reasons presented above for why I believe the example of the insufficiency of the subjective succession should be interpreted in a counterfactual sense.

Van Cleve argues that there may be phenomenal events that are merely observable, and not knowable, and that the necessary condition of knowing an event therefore does not apply to those events that are of the merely observable kind. I believe there is little support for the possibility of such raw, perceptual experience in Kant. The “mere observation” of a phenomenal event is a perceptual experience that results from the categorial determination of the sensible manifold and which is necessary for the possibility to have this experience at all. The application of the cause–effect rule is that which makes it possible for us to have an objective experience in the first place, where things do not pop in and out of existence as if they were miracles, but are rather connected in a unified experience according to necessary principles. Kant also calls objective experience, as a connected, dynamical unity, *nature*, and accordingly, the Analogies are the transcendental laws which first make nature possible.¹⁹³

If the application of the relational categories is necessary for having objective experience of a phenomenal event, does this mean that we thereby have knowledge of this event? Both Guyer and Van Cleve take the principles of the Analogies to provide conditions for the verification of claims to *empirical knowledge*. Kant, however, sharply distinguishes knowledge (*Wissen*) from experience (*Erfahrung*) and cognition (*Erkenntnis*). The latter two are the result of categorial determined synthesis on the content of empirical intuition, such that this content can be brought to objective unity, that is, *thought*. Conversely, when thoughts are related to intuition, they gain objective reference.¹⁹⁴ This, however, is not sufficient to count as knowledge. *Knowledge*, for Kant, is a propositional attitude of taking something to be true on *sufficient* subjective and objective grounds.¹⁹⁵ To be in the state of knowing

¹⁹³ By nature (in the empirical sense) we understand the combination of appearances as regards their existence, in accordance with necessary rules, i.e., in accordance with laws. There are therefore certain laws, and indeed *a priori*, which first make a nature possible; the empirical laws can only obtain and be found by means of experience, and indeed in accord with its original law, in accordance with which experience itself first becomes possible. Our analogies therefore really exhibit the unity of nature” A216/B263.

¹⁹⁴ “Our cognition arises from two fundamental sources in the mind [...] through the former an object is *given* to us, through the latter it is *thought* in relation to that representation [...] Thoughts without content are empty, intuitions without concepts are blind.” A50–51/B74–75, original emphasis.

¹⁹⁵ “Finally, when taking something to be true is both subjectively and objectively sufficient it is called *knowing* (*Wissen*). Subjective sufficiency is called *conviction* (for myself), objective sufficiency, *certainty* (for everyone).” A822/B850.

something is thus to be in the state of having a justified, true belief. Objective experience and empirical cognition, on the other hand, do not have the same requisites – they do not require sufficient conditions to be possible. Kant does not claim that objective experience is incorrigible or infallible – there are a number of empirical conditions that may turn experience into a delusive affair.¹⁹⁶

By treating perceptual experience as something already present that must be tested or verified for it to become objective to us, Guyer too takes the principles of the First and the Second Analogies to provide *sufficient conditions* for empirical knowledge of change. In this way, I believe Guyer makes the principles of the Analogies both too weak and too strong. As principles of the possibility of experience, they are to provide something more than just empirical evidence of change – they are to first make that perceptual experience of change possible.¹⁹⁷ On the other hand, as principles of the necessary conditions of the experience of change, they do not, and cannot, provide sufficient conditions for empirical knowledge, or what is objectively true.

The argument from verifiability is too weak to establish the principle of the First Analogy, but not for the reasons that Van Cleve lists. It is rather too weak because it takes the experience of change that is argued for to be a reporting on perceptible, raw material that presents successions of representations of which some are to be verified as objective. I have argued that this way of looking at our perceptual experience is counter-intuitive, and that it seems difficult to square with the Deduction's argument for the application of the categories as necessary conditions for the possibility of perceptual experience as such. Any argument for the principles of the First and Second Analogies should argue for them being necessary conditions of the experience of change in this fundamental way.¹⁹⁸

¹⁹⁶ Mirages, color blindness, too much alcohol, too little coffee, too many nerves, to mention a few.

¹⁹⁷ This point is also made in Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason*: 337, n.24.

¹⁹⁸ The argument from action that was cited in support of the anti-regress premise of the anchoring argument, has sometimes been taken to offer an alternative, or even *the only*, epistemic route to substance. These are some lines from the argument: "How will one infer directly from the action to the *persistence* of that which acts [...] Action already signifies the relation of the subject of causality to the effect [...] Now on this account action, as a sufficient empirical criterion, proves substantiality", A205/B250, original emphasis. The epistemic access to substance as persistence is through inference, and action as sufficient criterion is that which licences this inference. In the same fashion that the inference from the subjective succession to the objective one presupposed perceptual experience, this inference from action to substance presupposes an already perceptual experience of action. Since the substance-accident rule is a necessary condition of the experience of change (and the perceptual manifestation of action simply is change), the substance-concept is thus already applied when having the experience of action. Accordingly, the epistemic access to substance via action can only be of an empirical, but not a transcendental kind, as encountering substance as a concept which first makes experience possible.

3.3.5 Interdependence in the Analogies

We have seen that for something to be experienced as a change, at least two conditions must be satisfied: (i) the incompatibility of certain predicates or states of affairs, and (ii) the synthetic validity of these predicates with respect to an object. We have further seen that (i) is possible only through the application of the cause–effect rule, and (ii) is possible only through the application of the substance–accident rule. From the alternative definition of change above, we see that the application of both principles of the First and the Second Analogies is necessary for the possibility of experiencing change. Guyer takes this to show that “the principle of the first analogy becomes interdependent with that of the *second* analogy”.¹⁹⁹ However, I do not think the contribution of different necessary conditions to a common result alone qualifies as “interdependence”. For this to be the case, these conditions should be conditioning *each other*. I will now attempt an outline of how the First and Second Analogies are interdependent.

The First and the Second Analogies both provide necessary conditions of the experience of change: the First Analogy through the ascription of predicates to an object; the Second Analogy through establishing that these predicates depict contradictory states of affairs. The application of the rule of the Second Analogy requires that the representations that it determines as necessarily ordered are already determined as possibly changeable determinations inhering in a substance. Accordingly, the principle of the First Analogy is a necessary condition of the application of the principle of the Second Analogy.²⁰⁰ Moreover, when the Second Analogy is grounded in the First, the rule of the Second Analogy is sufficient to establish the incompatibility of the coexistence of the represented states of affairs.²⁰¹ Since the incompatibility of the coexistence of the represented states of affairs is a necessary condition of the experience of change, the Second Analogy, taken together with the First, is sufficient to provide the necessary condition of the experience of change.

On the other hand, the argument for why the ascription of predicates to an object in the First Analogy is necessary is that it is required for the application of the rule for the Second Analogy, as that which is to make possible the experience of change. Accordingly, in *application* the Second Analogy is dependent on the First, but in *explanation* the First

¹⁹⁹ “for what is there argued is that knowledge of the necessity of a succession according to a rule is also a condition for empirical knowledge of the occurrence of any change”, Guyer, *Kant and the claims of knowledge*: 227. Original emphasis.

²⁰⁰ In the B-edition opening paragraph of the Second Analogy it is explicitly stated that its principle builds on the previous outcome of the First Analogy that every change is alteration, see B232–33.

²⁰¹ “Only thereby can *I be justified* in saying of the appearance itself, and not merely of my apprehension, that a sequence is to be encountered in it,” A193/B238, my italics.

Analogy is dependent on the Second. Together they sufficiently establish the necessary succession, or the impossibility of coexistence, of represented states of affairs, and as such, they jointly function as a necessary condition of the possibility of the experience of change.

In regard to what we learnt above, it is important not to confuse the fact that the First and Second Analogies together suffice for the establishment of the necessary succession of represented states of affairs, with the principles being sufficient conditions of the possibility of the experience of change as such. The Analogies do not purport to give sufficient conditions of the experience of change – only necessary ones. That Kant starts off with refuting a possible “empiricist” situation where objective change is directly perceptible, i.e., where perception is a sufficient condition of the experience of change, should not confuse one into thinking that Kant’s project is to offer *other* sufficient conditions of the experience of change. His program is rather to show that objective experience, *as a minimum*, requires the application of certain necessary concepts of the understanding for its possibility.

3.3.6 Knowing substance

From the previous chapter we remember that Guyer argued against the backdrop argument and the perceptibility of substance as persistence. On the ground of the transitory character of our representations, he took an inference from the permanent substratum of time to the permanence of substance to be illegitimate.²⁰² Furthermore, he took our changing representations to imply the imperceptibility of substance. Accordingly, it does not seem that Guyer offers an epistemic access to substance either through inference, or through perception.

Perhaps it is possible to find an answer to how substance is to be encountered by looking to what function the argument from empirical verifiability ascribes to the substance-concept? From the discussion above, we have seen that Guyer takes the application of the relational categories to warrant an inference from subjective succession to objective change. In the passage that I quoted in the beginning of this section, Guyer says that “knowledge of *alteration in an enduring substance*, a *fortiori* knowledge of the existence of enduring substance, is itself the necessary condition for knowledge of *any change* at all”.²⁰³ Accordingly, it appears that Guyer takes the application of substance–accident to amount to, or consist of, *knowledge* of substance. What kind of knowledge could this be?

We have seen that empirical knowledge for Kant is a taking to be true on sufficient, subjective and objective grounds. Having knowledge of substance in the sense of *Wissen* is

²⁰² “[T]he permanence of substance as object or bearer of qualities is inferred from the need for a permanent substratum of time itself.” Guyer, *Kant and the claims of knowledge*: 217.

²⁰³ Guyer, *Kant and the claims of knowledge*: 224. Original emphasis.

therefore too requiring – it would require that we have sufficient conditions for taking something to be a substance, i.e., this knowledge would be a kind of *recognition*. Accordingly, if the knowledge is interpreted as *Wissen* a perceptual experience of substance must be presupposed, together with sufficient conditions that make us recognize it *as* a substance. In this sense, substance is a perceptible, determinate object, i.e., an object with determinations. However, Guyer takes the knowledge of substance to be a necessary condition for the knowledge of change, and as such, the substance should be the substantial as a determinant of the determining synthesis. The line quoted above, continues: “Only by treating any putative case of *change* as an *alteration* in the states of a continuing substance can we have evidence for the occurrence of any form of change”.²⁰⁴ That is, Guyer equates the required *knowledge* of substance and its alteration, with *treating* our succeeding representations as determinations in a substance. To treat, or consider, something as substance is not the same as to have sufficient evidence (subjective as objective) that this something is a substance. I therefore think it is reasonable to conclude that Guyer does not mean knowledge of substance, in the sense of *Wissen*. What could he then mean?

In his three-step set-up of the argument from verifiability, Guyer emphasizes the application of the categories of substance–accident and cause–effect as necessary *rules* for the possibility of change. Accordingly, it appears that the epistemic access Guyer believes we get to substance is through the application of the substance–accident rule on our perceptions. That is, we first “know” substance in the objects of perception through the act of putting it there ourselves, as a necessary condition for the possibility of experiencing change. Substance is posited as an at least relatively persisting subject, in which determinations inhere.

This way of interpreting how substance is to be encountered in the objects of perception is not at risk of making substance an already perceptible, temporally determinate object, as we have seen was the danger with the backdrop thesis and with knowing substance in the sense of *Wissen*. Rather, the risk we are now facing is of removing substance too far from the objects of perception. The function of substance–accident is to serve in the determining of the subjective sequence of perceptions through being an object *x*, which the states can latch on to. The question therefore arises whether there is also something in the perceptions that is to become determined as the substance, and guides this determining, or whether the substance is rather to function as an empty subject to which all these perceptions belong. If the latter is the case, then the encountering of substance in the objects of

²⁰⁴ Guyer, *Kant and the claims of knowledge*: 224.

perceptions is not so much an encountering, as it is a *positing*. We will discuss the risks of this way of encountering substance later in this chapter.

3.4 THE KANT-FREGE VIEW

We will now have a short look at another argument that purports to prove that (FA**) every change is an alteration of something or other. Van Cleve himself is most attracted to the “Kant–Frege view”, an argument for every change as alteration that was first developed in Bennett.²⁰⁵ This view builds on Kant’s famous statement that existence is not a real predicate, which among other things provides Kant with the tools to refute the ontological argument for the existence of God.²⁰⁶ The view states that, accordingly, existence-statements can only be expressed with quantifiers, as in “ $\exists xFx$ ”. Bennett concludes from this that “the Kant–Frege view entails that there is no legitimate way of reporting the occurrence of an absolute existence-change.”²⁰⁷ The problem of how to experience change is thus understood not as a problem of perceiving, but as a problem of “reporting” or “expressing” that there is an existence-change.

For the sake of the argument, Van Cleve attempts to construe quantified sentences that can express an absolute existence-change. The strategy is to attach an essential property L to x , where x is, e.g., a hydrogen atom, such that if x loses L then x ceases to exist: $(x)(Hx \rightarrow \square [\exists y(y=x) \text{ only if } Lx])$.²⁰⁸ From $\exists x(Hx \text{ at } t_1 \ \& \ Lx \text{ at } t_1 \ \& \ \neg Lx \text{ at } t_2)$ ²⁰⁹ we then get $\exists x(Hx \text{ at } t_1 \ \& \ Lx \text{ at } t_1 \ \& \ \neg \exists y[y=x] \text{ at } t_2)$.²¹⁰ Van Cleve reports that this strategy fails, since $\neg \exists y(y=x)$ contradicts the theorem in standard quantification theory that everything exists: $(x)\exists y(y=x)$. The lesson to learn from this, he says, is that it is impossible to construct an existence-change of x through the existence-change of its essential property, among other things because it is unintelligible that something could lose an essential property. He draws the conclusion that the only way to express that x ceases to exist is to make *something else*, z , lose a property, where this property is essential to x ’s existence. Since the ceasing to be of x is only logically

²⁰⁵ Jonathan Bennett, *Kant’s Dialectic* (Cambridge: Cambridge University Press, 1974). 62–63.

²⁰⁶ “*Being* is obviously not a real predicate, i.e., a concept of something that could add to the concept of a thing. It is merely a positing of a thing or of certain determinations in themselves [...] Thus whatever and however much our concept of an object may contain, we have to go out beyond it in order to provide it with existence.” A598–601/B626–29, original emphasis. Kant first developed the idea that existence is not a real predicate, but a positing, in *The Only Possible Argument* (1763), see OPA 2:72–75.

²⁰⁷ Bennett, *Kant’s Dialectic*: 63. in Van Cleve, *Problems from Kant*: 115.

²⁰⁸ “For all x , if x is a hydrogen atom, then necessarily, x only exists if x has the essential property L .”

²⁰⁹ “There exists an x , such that x is a hydrogen atom at t_1 , and x has the essential property L at t_1 , and x does not have the essential property L at t_2 .”

²¹⁰ “There exists an x , such that x is a hydrogen atom at t_1 , and x has the essential property L at t_1 , and x does not exist at t_2 .”

expressible through the reporting of the loss of a property of z , Van Cleve takes the Kant–Frege view to have proved that (FA**) every change is an alteration in something or other.²¹¹

Van Cleve, furthermore, takes this result to show that adjectival entities are nothing but logical constructions: when we say that a blush comes into and goes out of existence, what we in truth are saying is that someone starts and stops blushing.²¹² Van Cleve thinks that in the case where adjectival entities could be shown to be only logical constructions, “modes without substances₁ would be out of the question indeed – they would be constructions without materials, or fictions without realities.”²¹³ Accordingly, he takes adjectival entities as logical constructions to underpin his anchoring argument that is to support that (FA*) every change is an alteration in a substance₁. As the alteration argument + p has shown, if (FA*) could be proven to be true, (FA) would follow. Consequently, Van Cleve takes the Kant–Frege view to be just that, which in the end proves the principle of the First Analogy as presented in (FA).

3.4.1 Thinking substance

What could our epistemic access to a substance be on this view? The Kant–Frege view claims that an existence-change can only be expressed or reported on through quantified sentences if the existence-change is an alteration. The variable that is changing will therefore be adjectival upon another variable, which cannot change in existence. This latter variable represents substance as the combined substance₁ and substance₂. Substance is thus expressed logically through a logical variable with an existential quantifier and certain properties. Because of the existential quantifier and certain theorems of standard quantification theory Van Cleve can here express logically not only that this variable is substance₁ as the logical subject that takes properties, but also that this subject exists, and that it cannot cease to exist while being the subject of changing properties. In this way, the first-order logic of the Kant–Frege view does indeed have more expressive power than the general logic at Kant’s time.

However, the reason why Kant argues in the *Critique* that general logic is insufficient to give cognition of objects of experience is not that the logic of his time is lacking in expressive power. On the contrary, Kant believes general logic to be an extremely powerful tool for thinking – powerful enough to delude reason to claim knowledge of the existence of objects independently of the possibility of experience. Kant’s tenet is that for synthetic propositions to be true, they must relate to possible experience, that is, it must be shown that

²¹¹ Van Cleve, *Problems from Kant*: 116.

²¹² Ibid., 117.

²¹³ Ibid., 110.

they have a possible application in sensible intuition. Propositions that claim the existence of something are synthetic propositions in that they move beyond the conceptual content of the proposition.²¹⁴ To be justified in claiming that something exists, this something must be shown to be found in possible perception, i.e., it must be (possibly) posited.²¹⁵ The problem is therefore not how it is possible to express logically that something exists, but how it is possible to justify that the logical expression is true. This justification cannot be had from logical theorems, but can only be achieved through a reference to a possible object of sensible intuition.

I believe this shows that the Kant–Frege view after all cannot support (FA**) and thereby establish the principle of the First Analogy. The reason why lies in the way the problem of experiencing change is translated to the problem of reporting on or logically expressing change (or existence-change). Bennett takes the Kant–Frege view to imply that there is no legitimate way of reporting on absolute existence-changes, and this is presumably to prove that (FA**) every change is alteration in something or other. That is, the Kant–Frege view is supposed to establish that absolute existence-change is ontologically impossible in virtue of it being logically inexpressible.

Although Kant denies that the principles of general logic are sufficient to establish the ontological possibility of something, he accepts that they are sufficient to establish the ontological *impossibility* of something.²¹⁶ What is logically impossible is also ontologically impossible. We have seen, however, that existence-propositions are synthetic in kind. As such they are not propositions, but *presuppositions* – of pure or general logic. The Kant–Frege view does not show that absolute existence-changes are logically impossible, only logically *inexpressible*. And the reason why they are logically inexpressible is that the logical framework that classical logic operates within already presupposes existence. It is therefore a misguided conception that the quantified sentences of the Kant–Frege view establish the logical impossibility of absolute existence-changes. What they establish is that absolute existence-changes are logically inexpressible in virtue of a theorem of standard quantification

²¹⁴ “If you concede [...] as in all fairness you must, that every existential proposition is synthetic” A598/B626.

²¹⁵ “The postulate for cognizing the *actuality* of things requires perception [...] not immediate *perception* of the object itself the existence of which is to be cognized, but still its connection with some actual perception in accordance with the analogies of experience”, A225/B272.

²¹⁶ “Hence we must also allow the *principle of contradiction* to count as the universal and completely sufficient *principle of all analytic cognition*; but its authority and usefulness does not extend beyond this, as a sufficient criterion of truth. For that no cognition can be opposed to it without annihilating itself certainly makes this principle into a *conditio sine qua non*, but not into a determining ground of the truth of our cognition.” A151–52/B191. Kant also calls the supreme principle of logic “the negative condition of all truth”, A59–60.

theory that says that everything in the logical domain exists. And this logical theorem is in dire need of transcendental justification if it is to have any ontological import.

Transcendental logic is superior to general logic in that it is able to *a priori* establish the reference-relation to objects of sensible intuition for the pure concepts of the understanding (under their sensible, restricting conditions, or schemata). It is therefore only transcendental logic that legitimately can say anything *a priori* about possible existence-relations among objects of sensible intuition. Rather than trying to prove an ontological proposition from the impossibility of *reporting* or *logically expressing* absolute existence-changes, one should therefore proceed from the impossibility of *experiencing* absolute existence-changes. The argument for the principle of the First Analogy should therefore be a transcendental argument that proves substance to be a necessary condition for the possibility of experiencing change.

The “epistemic” route to substance on the Kant–Frege view is a route by pure *thinking*. As such, it does not qualify as an epistemic route in Kant. Only thought *with* intuition can amount to the cognition of objects.²¹⁷ The Kant–Frege view cannot establish (FA**) and thus prove substance as a persistent, altering subject. In arguing for an altering subject on the grounds of “updated general logic” it is not in power to establish any genuine existence-relation between that subject and the determinations that change in it. Furthermore, in arguing on mere logical grounds, it does not take into account how this presumably established ontological relation relates to possible experience. In other words, the Kant–Frege view treats the existence-relation between the altering subject and its determinations as transcendently real. It is therefore hard to see how the Kant–Frege view can give us any clue as to how substance is to be encountered in the objects of perception.

3.5 ALLISON’S ALTERATION ARGUMENT REVISITED

Guyer believes change as alteration can be defended through an argument that makes the substance–accident rule a necessary condition for the possibility of change to be empirically verified. Van Cleve takes the position that the better argument for change as alteration is one that shows that absolute existence-change is logically inexpressible. We will now return to Allison’s interpretation of the alteration argument from the previous chapter. Allison’s alteration argument resembles the argument from verifiability in structure. However, it differs

²¹⁷ “Intuition and concepts therefore constitute the elements of all our cognition, so that neither concepts without intuition corresponding to them in some way nor intuition without concepts can yield a cognition. [...] Thoughts without content are empty, intuitions without concepts are blind.” A50–51/B74–75.

from Guyer's empirical verifiability argument in two ways: It does not start with the premise that existence-changes are imperceptible, and it does not take the principles of the Analogies to be conditions for verifying or providing evidence for empirical knowledge of change, but rather the experience of change itself. We will treat these aspects in turn.

Allison starts with a premise that is equivalent to step 2) in Guyer's argument, that the succession of our representations is insufficient to prove that an objective change has occurred. However, Guyer states that to compensate for that, it is necessary to show that the presence of one representation implies that the referent of the preceding representation ceases to exist. That is, something must show that *y* implies non-*x*. Allison, on the other hand, only states as a minimum requirement that we notice "some difference between what is observed in each case."²¹⁸ Allison believes this can happen through perceptual comparison²¹⁹ and it becomes evident that he does not take this difference in representations to show the incompatibility of the co-existence of what is represented: "From all that can be determined from the two observations alone, one could simply be having successive observations of coexisting states of affairs."²²⁰ Allison gives as an example his perceiving a desk at *t*₁ and perceiving a bookcase at *t*₂. From this, he says, "I do not assume that the desk has somehow 'become' or been changed into a bookcase."²²¹

This is where Guyer in step 3) appeals to the principle of the Second Analogy as that which is to secure the incompatibility of coexistence, when the principle is first grounded on the principle of the First Analogy. Allison, however, skips directly to the latter principle. Returning to the example of the desk and the bookcase, he states that even if the desk at *t*₁, was relocated and replaced by the bookcase at *t*₂, this would still not count as change for us. Then he states what is as close as he gets to an argument for why (FA**) every change must be an alteration in something or other:

If, by contrast, I experience or believe that I experience a genuine replacement change (as in the case of combustion), then I am constrained to refer the successive states of affairs to some common subject and to view this occurrence as an alteration in its states.²²²

²¹⁸ Allison, *Kants transcendental idealism: An interpretation and defense*: 241.

²¹⁹ "[I]f the coming into existence of the later state of affairs (the replacement change) is to be experienced, it must be *contrasted with* the earlier state of affairs (otherwise there would be no change), and this requires that both states of affairs (non-*x* and *x*) be experienced as successively existing states or determinations of an enduring object (*y*).²²⁰ Ibid., 241, n. 16. My italics. Also: "In other words, I cannot be aware that 'something has happened' unless I can contrast the present state of some object with its preceding state." Ibid., 250.

²²⁰ Ibid., 241.

²²¹ Ibid.

²²² Ibid.

For the experience of change to be possible, the perceptions must be referred to a common subject²²³ as this subject's determinations. Allison explains that this happens through assigning the represented states of affairs to an enduring substrate according to the substance–accident rule. This rule is therefore “the rule through which we think such a change.”²²⁴ Conversely, “to think such a change (as an object of possible experience) is just to connect one's perceptions according to the rule.”²²⁵

I do not find this argument very persuasive. Allison hardly provides any reason why we are constrained to refer our representations to a common subject for experience of change to be possible, other than “because we must”. That is, if we have the experience (or believe we have the experience) of change, then this is possible only because we apply the substance–accident rule in order to experience it. On a general level one might say that this is the argumentative strategy of the *Critique*, i.e., to show that if we have an objective experience with certain features, then the only way we can have this is through the application of certain pure concepts on the sensible manifold that is ordered in space-time. Accordingly, we are justified in claiming the objective validity of pure concepts such as substance–accident and cause–effect because only through these can we conceive of objects as we do. However, considering the amount of space and effort Kant spends on the System of Principles, and on the Analogies in particular, which in contrast to all the other categorial functions are given one principle each, it does not seem reasonable that Kant would settle with such a general explanation in the particular argument for substance as persistence.

I take the argument from verifiability to be explanatorily superior in that it actually provides an argument for why the substance–accident rule is necessary for the experience of change. Starting with the premise that 1) existence-changes cannot be directly perceived it proceeds to show that 2) something else must guarantee the incompatibility of the co-existence of the positive states of affairs that we are successively presented with. This “something” turns out to be 3) the cause–effect rule that is argued for in the Second Analogy. By showing that the application of the substance–accident rule is necessary for the application of the cause–effect rule, the principle of the First Analogy is thus proved as necessary for the experience of change. We remember that Allison defines change as “replacement-change”, i.e., as the replacement of one representation, x, by another, y. In itself, this shouldn't

²²³ Remembering that “subject” here is used in the sense of something which takes properties, not to be confused with a cognizing subject. See earlier note.

²²⁴ Allison, *Kant's transcendental idealism: An interpretation and defense*: 242.

²²⁵ Ibid.

preclude him from following a similar line of argument as the one presented by Guyer.²²⁶ He could easily have said that, “hypothetically, we could have experienced existence-changes, but since this is not possible, the only way for us to experience change is as the replacement of one item by another, i.e., the only change for us is replacement-change. However, since the incompatibility of coexistence is not directly perceptible, there must be a rule that...etc.”

However, the entire problematic of the impossibility of perceiving the absence of the real escapes Allison, perhaps due to the fact that he equates the positive, replacing state of affairs, *y*, in his replacement-change, with non-*x*. True, if the succession of the representations *x* and *y* is to represent an objective change, then *y* must imply non-*x*. However, in being a positive state of affairs, *y* is more than simply the negative aspect of *x*, and as such, it is not its direct opposite. E.g., in a traffic light, when the yellow light succeeds the green light to signal that vehicles should be planning to stop, the yellow light certainly implies the ceasing to exist of the green.²²⁷ However, yellow is still not the direct opposite of green.²²⁸ Allison gestures at the impossibility of perceiving incompatible states of affairs, but he does not pursue this line to argue explicitly for why it is then necessary to conceive of every change as an alteration.

Rather, Allison states that we are constrained to conceive of our succeeding representations as changing determinations of an altering subject for the experience of replacement-change to be possible. His argument for this is an exemplification of how we do not think of the relocation of the desk and the replacement with a bookcase as *a genuine replacement-change*. Here a qualification is needed. A “replacement-change” is according to Allison the replacement of one item, or state of affairs, by another. A “genuine replacement-change” now appears to be a replacement-change where the states of affairs concern the same matter or object, “as in the cases of combustion”.²²⁹ But in this case, Allison has defined “genuine replacement-change” as that which is “a way of existing that succeeds another way of existing of the very same object.”²³⁰ That is, a genuine replacement-change is *an alteration*. Allison’s argument for substance thus becomes the claim that we are constrained

²²⁶ Hence, I also placed Guyer as one of the proponents for the definition of change as “replacement-change”.

²²⁷ In contrast, the succession of the yellow light upon the red does not imply the non-existence of the red light.

²²⁸ Not even complementary colors are incompatible in the real sense of contradiction, since the colors are set in a continuous spectrum of wavelengths. This also means that a yellow with approx. 560nm wavelength will appear almost green, and vice versa, so instead of being the opposite of green it rather has affinity to green.

²²⁹ “If, by contrast, I experience or believe that I experience a genuine replacement change (as in the cases of combustion), then I am constrained to refer the successive states of affairs to some common subject and to view this occurrence as an alteration in its states.” Allison, *Kant’s transcendental idealism: An interpretation and defense*: 241.

²³⁰ A187/B230.

to conceive of our succeeding representations as alteration for the experience of alteration to be possible. Consequently, Allison's alteration argument appears to be circular, and is at best highly uninformative.

3.5.1 Perception vs. experience

Although I believe the argument from verifiability as presented by Guyer is more explanatory and less liable to circularity than Allison's alteration argument, I still favor the reading of Allison concerning *the outcome* of the argument for (FA**) that every change is an alteration in something or other. As we have seen, Guyer believes the argument for (FA**) is to prove that the substance–accident rule is necessary for the possibility of an inference to objective change from the subjective succession of our representations. The inference from a subjective succession presupposes an already perceptual experience yet to be verified as objective. We have also seen that Van Cleve's Kant–Frege view presupposes experience and that the problem of the experience of change is reduced to a problem of reporting, or logically expressing, absolute existence-change. Allison, on the other hand, believes the principles of the understanding, and the principles of the Analogies in particular, argue for the categories as necessary conditions of the possibility of experience, where experience is taken in a fundamental way. More explicitly, experience is interpreted as “cognition through connected perceptions”.²³¹

Until now I have avoided addressing the difference between “perception of change” and “experience of change”, and I have been using these locutions interchangeably. Allison, however, consistently speaks of the conditions for the possibility of *the experience* of change. To see why, we will here have a quick look at what Allison believes is the outcome of the Deduction.

We have in the previous chapter looked at how the Deduction argues for perception as the outcome of a synthesis that combines the sensible manifold in space-time into objective unity. This synthesis is determined by the categories, which as functions for judgment bring the manifold to the objective unity of apperception.²³² The Deduction thus seems to argue for the objective validity of the categories as necessary conditions to bring the manifold of intuition to perception. Part two of the B-Deduction, however, concludes:

Consequently all synthesis, through which even perception itself becomes possible, stands under the categories, and since experience is cognition through connected perceptions, the

²³¹ B161.

²³² §19, B141.

categories are conditions of the possibility of experience, and are thus also valid *a priori* of all objects of experience.²³³

Allison makes the point that the categories as necessary for the possibility of experience can be interpreted in two ways:²³⁴ In the minimal sense, they are only necessary of experience due to their being necessary conditions of perception. In the more substantial sense, they are taken to be involved in connecting these perceptions into experience. Allison agrees with the latter reading, which makes him believe in two different synthesis of the sensible manifold: one that brings the manifold into perception and one that connects these perceptions to the unity of experience.

This is where the principles of the Analogies become relevant, because Allison believes that whereas the mathematical principles²³⁵ of Quantity and Quality bring the manifold to perception, it is the dynamical principles, and only the ones of Relation, that bring these perceptions to experience. The first two principles are necessary conditions for the pre-cognitive or proto-conceptual perception, whereas the relational principles of the Analogies raise the perceptions up to a conceptual and cognitive level, through connecting them in judgment. Since the Analogies do not seem requisite for the possibility of perception, Allison takes the Deduction to prove the validity only of the mathematical principles and not the dynamical ones: “That is why an argument geared to linking the categories to perception (as that of §26 seems to be) cannot account for the epistemic function of *all* the categories.”²³⁶

Allison’s reading of the Deduction and the role of the principles, emphasizes the addition of concepts or judgment for experience to be possible, and as such it is an intellectualist or conceptualist reading. There are many problems related to both this kind of conceptualist reading and the opposed non-conceptualist one of the Deduction, which we do not have the space to deal with here.²³⁷ Suffice it to say that the big drawback with Allison’s reading is that due to making the dynamical categories necessary conditions of experience, but not of perception, it renders the Deduction unsuccessful and offers the categories very different degrees of importance in the making of experience.

²³³ B161.

²³⁴ Allison, *Kant's transcendental idealism: An interpretation and defense*: 198.

²³⁵ The categories are divided into mathematical (Quantity and Quality) and dynamical (Relation and Modality) principles, see B110.

²³⁶ Allison, *Kant's transcendental idealism: An interpretation and defense*: 200.

²³⁷ There are e.g. the questions of what the relation is between the synthesis of apprehension and transcendental time-determination, the relation between judgments of perception and judgments of experience in the Prolegomena and the subjective and objective unity of apperception, etc.

Despite this, there is one illuminating consequence of Allison's conceptualist view that cannot be left unnoted. Recognizing that Allison interprets the role of the principles of the Analogies to be that of connecting perceptions to a conceptualized, unified experience, makes it understandable why he defends the backdrop thesis: To him, the backdrop can be a perception and still be in need of synthesis to become temporally determined by the substance–accident rule. That is, Allison does not take perceptions to be already temporally determinate objects. If one sticks with a conceptualist account of the Deduction and the role of the Analogies as Allison does, then the backdrop thesis does not after all lead to a logical fallacy.

3.5.2 Connected perceptions

I believe it is unfortunate when an interpretation of the categorial functions renders the core argument for the categories' objective validity unsuccessful. I therefore remain hesitant to adopt the conceptualist standpoint that Allison promotes. I will here sketch a solution that makes the dynamical principles necessary for the possibility of perception and at the same time preserves the connecting function of the principles of the Analogies.

Allison's interpretation of the functions of the categories presupposes a notion of perception that is possibly too narrow and atomistic. By this I mean that he takes perception to be the consciousness only of that which is a determinate object in being composed of what is homogeneous in intuition through the application of the mathematical categories:

Those of quantity and quality are directly concerned with intuition of objects, and, therefore, with their perception, whereas the latter, or more specifically, the relational categories, are concerned with the existence of these objects in relation to each other in time.²³⁸

I am, however, not convinced that it is necessary to restrict the extension of perceptions to the consciousness of the composed homogeneous manifold (*die Zusammensetzung des mannigfaltigen Gleichartigen*)²³⁹. This might be tempting if one has an empiricist copy-theory of perception, and believes the mathematical properties of an object, like extension and figure, are the ones that displayed the object in its truest form (cf. Lockean simple ideas). But, as we have seen, this is not the Kantian theory of perception. Although a conceptualist, Allison defends that Kant has a complex theory of perception that involves categorial determination of the sensible manifold of intuition. Accordingly, I do not see why we should restrict ourselves to thinking of Kantian perceptions as depicting only homogeneous structures, as the

²³⁸ Allison, *Kant's transcendental idealism: An interpretation and defense*: 199.

²³⁹ B202–3. The synthesis of the homogeneous manifold stands under the principle of the Axioms of Intuition.

size and shape of a house, or the intensity of a ray of sun. Perceptions could just as easily comprise occurrences and other real connections and their relations in time.

If this could be the case, then “connected perceptions” (*verknüpfte Wahrnehmungen*) will signify perceptions that are connected *within*, or perceptions that display a connection. Experience as the “cognition through connected perceptions” will then signify a certain kind of perceptual experience that has features other than perceptual experience of homogeneously composed perceptions. The notion of perception will be a broad and complex one, comprising the whole of proto-conceptual experience. As such, this view on perception incorporates my other claim that the objective sequence of perceptions is the one that is most fundamental and transparent, and that a subjective sequence of perception can only be reached by abstraction and special attention. Moreover, this perceptual experience will be more objective than the perceptual experience offered by Allison in that all the categories are determinant of its possibility. As such, this way of looking at perception and perceptual experience does not undermine, but rather reinforces its objectivity, without over-intellectualizing it by making it dependent on conceptual judgment or rules of thought.

Is there any textual backing for such a broad notion of perception in Kant? There are at least places where Kant talks of “objects of experience” in such a way that the “object” comprises an event, i.e., connected perception(s), rather than designating an object that is numerically one: “The former [subjective sequence of apprehension] alone proves nothing about the connection of the manifold in the object”;²⁴⁰ “time cannot be perceived in itself, nor can what precedes and what follows in objects be as it were empirically determined in relation to it”;²⁴¹ and “That something happens, therefore, is a perception that belongs to a possible experience”.²⁴²

However, there are many passages, also in the Analogies, that speak in favor of Allison’s conceptualist interpretation. The relational categories here appear to be equated with functions or rules for thinking:

If therefore, my perception is to contain the cognition of an occurrence, namely that something actually happens, then it must be an empirical judgment in which one thinks that the sequence is determined, i.e., that it presupposes another appearance in time which it follows necessarily or in accordance with a rule.²⁴³

²⁴⁰ A193/B238.

²⁴¹ B233.

²⁴² A200/B245.

²⁴³ A201/B246–47.

Since establishing the possibility of interpreting perception in the broad sense as sketched above would take us far beyond the investigation of the concept of substance, I will leave the discussion here. Instead, we will now consider what kind of epistemic access to substance that Allison's interpretation of the alteration argument can offer.

3.5.3 Conceiving of substance

Allison believes the substance–accident rule is that which connects our perceptions into a unified experience.²⁴⁴ As such the substance–accident rule is an empirical judgment like the one mentioned in the quote above – a rule for judging our representations to consist of an altering subject in which determinations inhere and change. When Allison describes how the representations are to be connected through the substance–accident rule, he uses words like “assign” and “refer”. The application of the rule enables us to “*regard* the process of combustion as an alteration”; “*view* this occurrence as an alteration”; “*conceive of* such a transformation”; “as the rule through which we *think* such a change”.²⁴⁵ Which words does Allison use when he speaks of encountering substance as persistence in the objects of perception? “The persistence of matter must be *conceived of* as the persistence of its quantity”; “we *presuppose* some matter”; “it must be *presupposed* to endure throughout all change”; “this matter must be *conceived* as permanent”; “to *consider* the piece of wood as the temporary form [...] of some enduring matter”.²⁴⁶

The vocabulary used here strongly suggests that Allison takes the substance–accident rule to be a rule for thinking. The application of the rule seems to be of the determining kind – and as such it reminds us of the positing activity of Guyer. There is no sign that there is something in the representations that guides which representations are to be assigned as determinations to a subject in which they can inhere, and which are to count as the altering subject itself. The substance–accident rule is further a rule for thinking, in that it makes it possible to regard, view, conceive of, or think change as alteration. We remember that Allison interpreted the argument of the First Analogy to be that (A) it is necessary that I conceive of every change as an alteration for the experience of change to be possible. The application of the substance–accident rule is a necessary condition for the experience of change since it makes it possible for us to conceive of every change as an alteration.

²⁴⁴ “[T]he assignment of the successively represented states of affairs to an enduring substratum (as its successive states) functions as the rule through which we think such a change [...] such a change (as an object of possible experience) is just to connect one’s perceptions according to the rule.” Allison, *Kant’s transcendental idealism: An interpretation and defense*: 242.

²⁴⁵ Ibid., 241–43.

²⁴⁶ Ibid., 242–45.

Most importantly, the epistemic access to substance appears to be through thinking it, conceiving of it, presupposing it, or considering it, as that which is permanent and can function as a subject in which everything else alters. There is no sign of any perceptual contrasting between the substance and its determinations as we encountered in the backdrop thesis. Although we in the above showed that for Allison and his conceptualist account of the role of the relational categories, the backdrop thesis does not lead to a logical fallacy, he still does not seem to incorporate it as a constitutive part of his overall argument for substance as persistence. If Allison himself can find the backdrop thesis superfluous, then so can we.

In the foregoing we have evaluated two other options for encountering substance in the objects of perception *as an altering subject*. I questioned whether the application of the substance–accident rule in the argument from verifiability was at risk of removing substance too far from the objects of perception. In regard to the Kant–Frege view, I did not even question this, but rather established that the logical expressibility-thesis made the epistemic access to substance one of pure thinking. Allison will probably argue that his “conceiving of” substance is not a pure thinking, and that it relates substance to objects of perception through the application of the substance–accident rule. However, Allison, as Guyer, appears to have an interpretation of the application of the substance–accident rule that involves the imposition of substance onto perceptions without these perceptions having much to say in how this is done. In particular, it is not evident how the schema of substance is necessary for the application of the substance–accident rule, if it is wholly up to the understanding how this rule is to be applied.

3.6 POSSIBLE PITFALLS

Thus far, we have evaluated three different arguments for why (FA**) every change is an alteration in something. We have seen that the argument from empirical verifiability and the Kant–Frege view take the possibility of the experience of change to be the possibility of *reporting* on change, either in the form of sufficient evidence, or in quantified sentences in first order logic. The problem with both of these interpretations is that they presuppose that we already have an experience of change, if not yet “verified” to be objective. Consequently, we evaluated Allison’s alteration argument to see whether it could prove more successful. I argued that Allison’s argument is circular due to his definition of change as “genuine replacement-change”, which turns out to be Kant’s definition of “alteration”. However, I

avored Allison's reading of the outcome of the argument of the First Analogy as the possibility of the experience of change in a fundamental sense.

Common to all these arguments is that they offer a way of encountering substance through thinking or conceiving substance *in or through* that which is perceptible. Accordingly, substance is not directly perceived, but is rather posited as a somewhat hidden constituent of the objects of perception. There are some risks with this way of thinking or conceiving of substance in the objects of perception. We will now turn our attention towards these risks.

3.6.1 Substance considered apart from its schema

From the previous chapter we remember that Van Cleve claimed that it is only the determinations of the substance that can be perceived, and that we rather conceive of substance. In discussing this claim we realized that what is actually perceptible is the determinate object, which first displays the content of intuition as determinations inhering in a subject. Determinations are thus not perceptible apart from their subject either. Moreover, we learnt that perception is the outcome of the synthesis that is governed by the logical functions of the understanding directed at the sensible manifold. Accordingly, perception is not something that can be prior to the application of the substance–accident rule. Now, a problem with the arguments presented above²⁴⁷ is that they take the determinations of a substance to be perceptible *per se*, whereas substance is judged to be or conceived of as that which supports these perceptible determinations. The concept of substance becomes that hollow concept of Locke of something unknowable that is to subsist in or support that of which we actually have simple ideas of.

The arguments for substance that base themselves on the alteration argument are liable to fall into the Lockean trap since the concept of substance that is prominent in this argument is substance as a subject that takes properties, i.e., substance₁. Since the arguments for (FA**) defend substance as a necessary condition for the possibility of change as altering subject, it is

²⁴⁷ Ontological approaches like Van Cleve's have a tendency to interpret objects of knowledge as independent of our experience of them (that is, objects of knowledge *as they can become known*, not with respect to their existence). Van Cleve sometimes comes close to a transcendental realist interpretation of objects and our access to them, and accordingly his notion of perception can be one of direct resemblance of an object's determinations. In contrast, Allison locates objects of knowledge and perception within Kant's transcendental idealist framework, and interprets both as something that we have access to on account of sensible and intellectual conditions of human cognition. It might therefore be objected that Allison's reading saves substance from becoming an ultimate subject of predication. However, I still believe Allison is at risk of turning substance into something close to a transcendental object. In taking the function of the relational concept of substance–accident to connect perceptions into objects of experience, he too risks taking the perceptions to represent determinations that are to be collected in an object that they can be determinations of. As such, substance becomes an ultimate subject of predication.

easy to “forget” the other aspect of substance as something that persists, i.e., substance₂. That is, in thinking or conceiving of substance as that which supports changing determinations it is easy to consider substance apart from its schema or sensible condition.

From the previous discussion we know that substance considered apart from its sensible condition becomes an absolute subject. We further know that it is the sensible condition under which alone a category can bring the content of intuition to objective unity. To consider substance apart from its schema is therefore to neglect the determining function that it has in first rendering determinate objects with determinations possible. Somewhat paradoxically, the upshot of this is that substance becomes over-objectified. There are two ways in which this can happen.

3.6.2 Substance as transcendental object

One way that substance becomes over-objectified is when treated as *an ultimate subject of predication*,²⁴⁸ which again turns it into *a transcendental object* or an object in general. How does this come about? We remember that Van Cleve believes we only have perceptions of a substance’s determinations. On a Kantian picture the content of intuition furnishes us with material for concepts, and concepts are possible predicates in a judgment.²⁴⁹ Since according to Van Cleve substance cannot be perceived, it seems to follow that substance cannot be a predicate of anything.²⁵⁰ Accordingly, substance is given the special function of being the ultimate subject of predication. We recognize the identification of substance with the ultimate subject of predication as the second of the two routes that I suggested Van Cleve might wish to follow in order to argue for the imperceptibility of substance (the first being that determinations, in contrast to substance, are directly perceptible). As this ultimate subject of predication, substance is taken to represent the underlying object that supports the determinations that we have perceptions of.

²⁴⁸ It is important to point out that I do not take the “ultimate subject of predication” to be identical with the “ultimate subject of alteration”, or substance₁, from the alteration argument. Allison, on the other hand, uses the term “ultimate subject of predication” as a synonym to the “ultimate subject of alteration”, see e.g. “this matter of which things are composed is the ‘ultimate subject’ of predication, or equivalently, ‘the substantial’ in things.” Allison, *Kant’s transcendental idealism: An interpretation and defense*: 243. True, it is the predominant focus on substance₁ in the alteration argument that may lead to considering substance as an ultimate subject of predication. However, substance₁ is considered as an existing thing that alters, whereas the ultimate subject of predication is first and foremost considered as a logical subject that unifies predicates, and only derivatively is it projected as a “real thing” that determinations inhere in. More on this in what follows.

²⁴⁹ A69/B94.

²⁵⁰ Van Cleve himself does not equate substance with the ultimate subject of predication. In his chapter on noumena and things in themselves, he repudiates the claim that “A substance can have no qualities, because it is that which *has* the qualities.” Van Cleve, *Problems from Kant*: 140.

Longuenesse has an interesting discussion of how substance can be mistaken as an ultimate subject of predication.²⁵¹ She shows that the distinction Kant makes between logical and real predication marks a shift “from traditional predicative logic to a consideration of *extensions*, or the *objects* thought under concepts.”²⁵² In traditional predicative logic there is a subject that takes predicates: “A is B”. Longuenesse explains that Kant in his *Logik* argues that every judgment of the form “A is B” can be developed into: “To everything *x*, to which the concept A belongs, belongs also the concept B.”²⁵³ Kant then continues: “An example of an *analytic* proposition is, To everything *x*, to which the concept of body (*a + b*) belongs, belongs also extension (*b*). An example of a *synthetic* proposition is, To everything *x*, to which the concept of body (*a + b*) belongs, belongs also attraction (*c*).”²⁵⁴ That is, the difference between analytic judgments and synthetic judgments is that the former are true merely in virtue of the content of the concepts involved, whereas the latter are true only by reference to an object that can be subsumed under the relevant concepts.²⁵⁵ However, Kant’s shift to a consideration of the extension of concepts has as a consequence that if the concepts involved in *any* judgment (either analytic or synthetic) are to have sense and significance²⁵⁶, they must ultimately relate to singular objects.

²⁵¹ Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason*: 325–33.

²⁵² *Ibid.*, 325.

²⁵³ *Ibid.*, 86.

²⁵⁴ *Logik* 9:111, in *ibid.*, 87.

²⁵⁵ Kant defines inferring (*schließen*) as that of judging mediately “through the subsumption of a condition of a possible judgment under the condition of something given” (A330/B386), where the “something given” is a universal rule. The “conditions” are subsumable or subsuming terms that provide the warranting link between the universal rule and the particular case. Longuenesse believes Kant inherits the term “condition” from the Wolffian school, and that it can best be understood as a sufficient reason for the predication of the predicate of the universal rule to the subject in the particular case. *Ibid.*, 95, n. 33. Longuenesse describes how one can understand the three relations of judgment (the categorical, hypothetical and disjunctive) as a potential major premise in a syllogistic figure, due to any judgment being a concept-subordination between two concepts. *Ibid.*, 90–99. In the judgment: “Caius is mortal”, the concept of Caius is subordinated to the concept of being mortal. This judgment can now be used to ascribe predicates to objects, such that if the concept with less extension is predicated of something, the judgment provides the rule for predicating the concept of larger extension of the object too. In this, “Caius” will be the condition under which *x* is subsumed, and which warrants the predication of *x* as “mortal”, where *x* is an object of sensible intuition. What distinguishes analytic judgments from synthetic ones, is that the condition of the latter must subsume an object of sensible intuition, *x*, for the predication of *x* to be valid, whereas in analytic judgments, the predicate in the conclusion is already contained in the subsuming condition as its definition.

²⁵⁶ “Thus the schemata of the concepts of pure understanding are the true and sole conditions for providing them with a relation to objects, thus with *significance*”, A146/B185, original emphasis, and “this further extension of concepts beyond our sensible intuition does not get us anywhere. For they are then merely empty concepts of objects [...] mere forms of thought without objective reality [...] Our sensible and empirical intuition alone can provide them with *sense and significance*.” B149, my emphasis. For an interesting analysis of the different uses of “sense and significance” (*Sinn und Bedeutung*) in Kant and Frege, see J. P. Nolan, «Kant on meaning: Two studies,» *Kant-Studien* 70, no. 1–4 (1979).

Now it may be tempting to think that the function of the relational concept of substance–accident is to relate x to the concepts (a, b, c) as accidents to a substance. In this case, substance becomes the ultimate subject of predication, x . Longuenesse argues, however, that this cannot be the case.²⁵⁷ In the Deduction and elsewhere Kant makes it clear that the function of the categories is to determine the content of intuition such that the corresponding concept is determined with respect to its logical position in judgment:

Yet in regard to the merely logical use of the understanding it would remain undetermined which of these two concepts will be given the function of the subject and which will be given that of the predicate [...] Through the category of substance, however, if I bring the concept of a body under it, it is determined that its empirical intuition in experience must always be considered as subject, never as mere predicate.²⁵⁸

That is, as long as substance is taken to be the ultimate subject of predication, the substance–accident relation is just the subject–predicate relation directed at objects. In this case there will be nothing that tells us to always consider one concept as subject and another as predicate, and not the other way around.

The Schematism establishes that categories only determine the content of intuition under their sensible conditions, their schemata. The difference between whether a concept is determinately located in a judgment or not, is thus the difference between applying the logical functions of the understanding to concepts and applying these logical functions directed at objects of sensible intuition (the categories) under their schemata. The substance–accident relation can therefore not determine the sensible manifold under a concept without its schema. It then seems plausible that the schema should have a role to play in determining what sensible data that are to be subsumed under which concept. That is, the schema of persistence should have something to say in regard to which content of intuition that is subsumed under the concept of substance and not. If this is true, however, it should be possible to somehow encounter substance in the content of intuition. Accordingly, substance should not merely be an ultimate subject of predication, x , to which the content of intuition is to attach.

If substance is not an ultimate subject of predication, what is? As ultimate subject of predication, the variable x has as its function to collect all predicates into an objective unity. As such, x represents the singular object that is in the extension of our concepts such that they have meaning and reference, or as Kant says: sense and significance. If it is not available to us

²⁵⁷ Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason*: 327.

²⁵⁸ B128–29.

to use the concept of substance as that which collects the predicates into an object, i.e., to think this object, could we rather come across it in intuition? In the Deduction Kant argues that no synthetic or combined unity can be found in the sensible manifold of intuition.²⁵⁹ Not even the empiricist Locke believes that it is possible to have a simple idea of the thing that supports the qualities from which we get our simple ideas. So the referent of our concepts is not to be found in the content of intuition. What, then, is to gather our representations into an object?

The way out of this is realizing that in transcendental idealism (i) the *x* that unifies the material in intuition into an object is not the object itself, and furthermore, (ii) the referent of our concepts arising from this unifying activity is not this *x*. On a transcendental idealist picture, the referent of our concepts (ii) is the *cognized* object or an object of experience – not a transcendently real object that is independent of our experience of it. Moreover, that which unifies the sensible manifold in intuition into objective unity (i) is the *transcendental unity of apperception*, or the unity of consciousness of the manifold.²⁶⁰

Consequently, when substance is taken to be the ultimate subject of predication, and the latter supposedly is that which collects our representations into an object, the concept of substance is actually given a task that belongs to the transcendental unity of apperception. It is the latter that brings the sensible manifold into objective unity, and it is called objective on that account.²⁶¹ Although that which unifies an object of mere thought is the ultimate subject of predication, things stand differently when the object is to be an object of experience. For our concepts to have reference to such an object, they must be the results of a synthesis of sensible intuition united into objective consciousness:

If I would think of a thing through the understanding, then something must be thought of as the ultimate subject, to which everything else pertains as predicate (but what does the ultimate subject signify for me?). [...] All of this indicates that our understanding certainly has its own rules for thinking of something, but that *we cannot give these thoughts any application and significance except through sensible intuition, which we bring under the condition of the unity*

²⁵⁹ “Every intuition contains a manifold in itself [...] in order for *unity* of intuition to come from this manifold [...] it is necessary first to run through and then to take together this manifoldness”, A99, original emphasis, and “Yet the *combination (conjunctio)* of a manifold in general can never come to us through the senses”, §15, B129, original emphasis.

²⁶⁰ “The *transcendental unity* of apperception is that unity through which all of the manifold given in intuition is united in a concept of the object.” §18, B139, original emphasis.

²⁶¹ §18, B139.

of consciousness of the manifold, and that in the end the reality of experiential concepts lies only in experience, and indeed in experience in general as such [...] ²⁶²

Accordingly, the unity of our representations does not come about through collecting them in a subject that represents an independent object transcendently outside of us. This collecting activity would be arbitrary and could not result in any determinate object. Rather, the unity is due to the transcendental unity of apperception that connects the sensible material into a necessarily connected (*verknüpft*) unity. In the Deduction we are shown that this activity of bringing representations to unity is the logical function of judgment. ²⁶³ Furthermore, “the *categories* are nothing other than these very functions for judging, insofar as the manifold of a given intuition is determined with regard to them.” ²⁶⁴ Accordingly, the substance–accident relation is one of several functions for judging through which the manifold is unified into an object. However, the concept of substance alone, and not as a relational concept, is not able to connect this manifold. Moreover, since the substance–accident relation is only one function of many that unite the sensible manifold in an object, substance is not the ultimate subject of predication.

The referent of our concepts is the cognized or determinate object as the result of the unifying activity of apperception, and not a thing in itself. However, in the determining process it is possible to think this cognized object as an object that is yet to be. This *x* is the *concept of an object in general* that all representations become connected to through synthesis. In this way, this indeterminate object *x* functions as a unifying referent in parallel to the ultimate subject of predication. If substance is taken to be the latter, it thus becomes the concept of an object in general. ²⁶⁵ We have seen, however, that the real unifier is not an object in itself, but the transcendental unity of apperception. The concept of an object in general is thus only a projection of the unity that comes about when the logical functions of the understanding are applied to the content in intuition. This projected unity is only a logical construct without any real content. Kant also calls this logical unity *the transcendental object*:

All our representations are in fact related to some object through the understanding, and, since appearances are nothing but representations, the understanding thus relates them to a *something*, as the object of sensible intuition: but this something is to that extent only the

²⁶² R 5929, 18:390 (1783–84), my emphasis.

²⁶³ “a judgment is nothing other than the way to bring given cognitions to the *objective* unity of apperception” §19, B141–42.

²⁶⁴ §20, B143.

²⁶⁵ This is also Longuenesse’s conclusion of her discussion on substance as ultimate subject of predication. Longuenesse, *Kant and the capacity to judge: Sensibility and discursivity in the transcendental analytic of the Critique of pure reason*: 326.

transcendental object. This signifies, however a something = X , of which we know nothing at all nor can know anything in general (in accordance with the current constitution of our understanding), but is rather something that can serve only as a correlate of the unity of apperception for the unity of the manifold in sensible intuition, by means of which the understanding unifies that in the concept of an object.²⁶⁶

Since this transcendental object is empty of all determinate meaning and reference, it is only what Kant calls a noumenon in the negative sense.

Considering substance only as a subject in which determinations inhere, such as the alteration argument does, runs the risk of taking substance to be the ultimate subject of predication, x . As such, substance becomes the referent of the categorial synthesis, as the concept of an object in general or a transcendental object. Furthermore, substance is given the unifying function of the transcendental unity of apperception. Substance is thus over-objectified both in what it is to represent and with respect to its function.

3.6.3 The soul as substance

We have seen that if substance is considered apart from its schema, it easily becomes the common subject in which all our representations are to be collected, i.e., an ultimate subject of predication. We have also seen that as ultimate subject of predication, substance is taken to represent the (real) object that unites these representations into an objective unity. As such, it takes on the task of the objective unity of apperception, which has as its reference the transcendental object as a projected, logical unity.

There is a peculiar corollary to this. The risk of mistaking substance for an ultimate subject of predication, as a mere logical unifier and unity, is due to the neglect of its schema: persistence. The schema of substance is that which alone warrants the application of the substance–accident relation onto the sensible manifold and is that which first brings the latter to objective unity. Having turned substance into the transcendental unity of apperception, as that in which all our representations are collected and united, this logical unity may now become *substantiated* again. That is, the logical unity may now be projected as an *inner* object as that in which all our representations inhere.

Our representation of the logical unity that combines our representations into objective unity is the consciousness of the “I think”. Kant states in the Deduction that for any representation to be something for me, this representation must be able to be accompanied by

²⁶⁶ A250, original emphasis.

the “I think”, or my self-consciousness.²⁶⁷ Accordingly, it is the substantiation of the “I think” which creates the representation of an inner object, in which my representations inhere as inner determinations. The “substantiation” of the “I think” occurs when the “I think” is thought of as a persistent substance. Accordingly, by applying the schematized concept of substance to the logical unity of apperception, we are in the possession of the concept of a persistent soul. This fallacious inference is the First Paralogism of Substantiality:

That the representation of which is the *absolute subject* of our judgments, and hence cannot be used as the determination of another thing, is *substance*. I, as thinking being, am the absolute subject of all my possible judgments, and this representation of Myself cannot be used as the predicate of any other thing. Thus I, as thinking being (soul), am *substance*.²⁶⁸

What happens in this paralogism is that the major premise strips the concept of substance of its schema by identifying it with the ultimate subject of predication. In the minor premise there is then an equivocation of the concept of a “thinking being” as both transcendental subject and something with an empirical existence. When predicating substantiality of this thinking being in the conclusion, one is therefore misled to take the thinking being as a substance in the schematized sense, a persistent entity. Through this fallacious inference we get the concept of a persistent, intelligible being: an immortal soul.

We here see a further risk in considering substance apart from its schema, beyond the over-objectification of the concept’s function and reference. In identifying it with an ultimate subject of predication, it in addition becomes a link to predicating temporal existence of something that only has logical reference:

[T]he first syllogism of transcendental psychology imposes on us an only allegedly new insight when it passes off the constant logical subject of thinking as the cognition of a real subject of inherence, with which we do not and cannot have the least acquaintance, because consciousness is the one single thing that makes all representations into thoughts, and in which, therefore, as in the transcendental subject, our perceptions must be encountered [...]²⁶⁹

This serves as a reminder that the schematized concept of substance is valid only in relation to objects of possible experience, i.e., it can only be applied to objects of sensible intuition.

²⁶⁷ §16, B131–32: “The *I think* must *be able* to accompany all my representations; for otherwise something would be represented in me that could not be thought at all, which is as much as to say that the representation would either be impossible or else at least would be nothing for me.”

²⁶⁸ A348.

²⁶⁹ A350.

3.6.4 The noumenon in the positive sense

In the previous we have looked at the risk of considering the concept of substance as an ultimate subject of predication, as that which is to unify our representation into an object. In function it thus becomes the objective unity of apperception and in reference it is turned into a transcendental object. We have then looked at what happens when this logical construct is once again *substantiated*, or equated with substance as persistence. It then becomes the concept of an immortal soul. We will now look at how the logical unity can become substantiated in another way. This happens when the transcendental object is projected as an *outer* object of determinate content. Substance is then turned into a noumenon in the positive sense.

Let us return to Van Cleve once more. Whereas we perceive the properties of a thing we can only *think* an existing thing as their support, that is, we predicate our perceptions to be inhering in a subject. Since, on this account, substance is not possibly, to be met with in intuition, substance is easily pushed out of the sphere of possible experience. That is, there is a slippery slope from thinking of substance as the (mere) subject of our representations to thinking of substance as a determinate object transcendently outside of us that causes these representations in us.

We see here a slide from the consideration of the objective relation between a subject and its inhering accidents, to the consideration of the relation between a transcendental object that affects sensibility and the sensible manifold in intuition. According to Bennett, this fallacious slide has been effected several times in the history of philosophy, and its origin is to be ascribed to Locke's reception in Berkeley. Bennett lists two Lockean theses that Berkeley objects to: (i) every property-instantiation implies the existence of a substance that these properties inhere in, and (ii) simple ideas resemble the real things that they depict.²⁷⁰ The problem is that Berkeley, at least according to Bennett, mixes these theses into a "Lockean doctrine of material substance" that actually never existed. He does so by uniting in "material substance" the concept of substance from (a) and the concept of a real thing as matter in (b). Bennett then sums up Berkeley's objection to Locke in this way: "Things are just collections of ideas, not something over and above them."²⁷¹

Bennett concludes that Berkeley commits the error of confusing the relation between a thing and its properties with the relation between the objective and the subjective. In the Kantian framework, the thing and its properties are not independent of our determining it, and

²⁷⁰ Bennett, *Kant's analytic*: 185.

²⁷¹ *Ibid.*, 186.

as such must be understood as the determinate object with determinations that is the result of a determining synthesis. Moreover, transcendental idealism changes the meaning of the objective and subjective. Objectivity is something that first latches on to that which can be categorially determined, and the transcendental object that affects my sensibility is not determinable in this way.²⁷² In the Kantian context, the objective/subjective-distinction of Bennett is therefore better understood as the distinction between the transcendental object that grounds our representations, and these representations themselves, which occur in space and time.²⁷³

Whether it is Berkeley's fault or not, the slide from considering substance as subject of its determinations to considering a transcendental object as the origin of our sensible representations must be avoided for all that it is worth. This is because the transcendental object as that which grounds our sensibility is a limiting concept without determinate content, or a noumenon in the negative sense: "The concept of a noumenon is therefore merely a *boundary concept (Gränzbegriff)*, in order to limit the pretension of sensibility, and therefore only of negative use."²⁷⁴ However, if the transcendental object is equated with substance as property-bearer, and this substance is the cause of our representations, the transcendental object turns into a determinate object with properties. The transcendental object thus becomes a noumenon in the *positive* sense, or a thing in itself.

An example of what happens when substance is identified with the transcendental object, and becomes a thing in itself, is found in Langton's *Kantian Humility*.²⁷⁵ Langton here proposes a new, metaphysical interpretation of things in themselves and their relation to appearances that she thinks can solve "the old problem". "The old problem" is to square Kant's claim that (i) things in themselves exist and ground phenomenal appearances, with the claim that (ii) we can have no knowledge of things in themselves. The last epistemological

²⁷² Exactly in what way things in themselves are unknowable or indeterminable is a matter of dispute in Kantian scholarship. The dominant view is that it is best understood in the way that we can only have indeterminate or general knowledge of things in themselves through analytic propositions. Accordingly, from conditioned sensible manifold we can infer analytically to a condition or ground of this manifold, but what kind of ground this is, or how it affects us, remains unknown to us.

²⁷³ "In the connection of experience matter as substance in appearance is really given to outer sense, just as the thinking I is given to inner sense, likewise as substance in appearance; [...] The *transcendental object* that grounds both outer appearances and inner intuition is neither matter nor a thinking being in itself, but rather an unknown ground of those appearances that supply us with our empirical concepts of the former as well as the latter." A380.

²⁷⁴ A255/B310–11, original emphasis.

²⁷⁵ Rae Langton, *Kantian humility: Our ignorance of things in themselves* (Oxford; New York: Clarendon Press; Oxford University Press, 1998). I first discussed Langton's account of substance in Silje J. Eggestad, «Langton's argument for humility vs. Kant's critical project,» (UCSD, 2012).

point seems to render Kant's transcendental idealism inexpressible.²⁷⁶ Langton's route to solving this problem is to define genuine substances as self-subsisting things in themselves with intrinsic properties. In contrast, a phenomenon is something that only exists by standing in a dynamical relation with substances. Langton thus takes phenomena to be the relational properties of substance.²⁷⁷ The causal relations and the relational properties of a substance are not reducible to its intrinsic properties; this is the "irreducibility thesis".²⁷⁸ Accordingly, Langton believes she can solve the old problem by saying that substances exist and are the causes of phenomena, but that due to the irreducibility thesis we cannot have knowledge of substances as they are in themselves (their intrinsic properties). We can only have knowledge of their relational properties, the phenomena. This is how she interprets "Kantian humility".

There are several problems with Langton's account. For instance, the textual evidence from Kant's critical period that she takes to support her distinction between intrinsic and relational properties of substances is a passage in the Amphiboly, A265/B321. Rather than underpinning Langton's distinction, Kant here argues that before determining anything about an object and its properties, it is necessary to reflect on which faculty (the understanding or sensibility) the object relates to.²⁷⁹ As objects of the pure understanding substances can have inner determinations. However, we are only acquainted with substances as determinate objects through sensibility, as *substantia phaenomenon*. It is therefore not available to us to cognize substances as something in themselves. Langton's mistake is that she skips transcendental idealism and its thesis of space and time as necessary forms of our sensibility, and tries to prove a Kantian argument for humility about the knowledge of objects without it. This turns out to be impossible.

The latter two discussions serve as a warning in our investigation of how to encounter substance in the objects of perception. If substance is taken apart from its schema, and treated as an ultimate subject of predication, there is a slippery slope to project this either as an inner object or as a transcendently outer object. In both cases, the subject is then considered as a determinate object and appropriates the property of persistence as an alleged substance in the schematized sense. Respectively, substance is turned into an immortal soul or a noumenon in the positive sense. In the investigation of what a Kantian substance is, we should always be looking for a way to apply the principle of the persistence of substance to objects of possible

²⁷⁶ Langton, *Kantian humility: Our ignorance of things in themselves*: 7–8.

²⁷⁷ *Ibid.*, 18–20.

²⁷⁸ *Ibid.*, 124–26.

²⁷⁹ Kant calls this activity "transcendental reflection".

experience.²⁸⁰ If not, we are no longer investigating the concept of substance within Kant's critical framework of transcendental idealism.

²⁸⁰ “[T]hese analogies have their sole significance and validity not as principles of the transcendental use of the understanding but merely as principles of its empirical use [...] consequently the appearances must not be subsumed under the categories per se, but only under their schemata.” A180–81/B223.

4 CONCLUSION

The starting point of this thesis was the following question: *How are we to interpret the claim that substance is to be encountered in the objects of perception?* What has the preceding discussion established in this regard? Which access do we have to substance, and what does this say about what a substance is in Kant?

4.1 SUMMARY OF THE DISCUSSION

In pursuit of an answer to the guiding question, we considered the two main arguments that have been taken to represent the argument for the principle of the First Analogy.

We discussed the backdrop argument as an argument for the principle of the First Analogy that displays substance as an object of perception. We evaluated Melnick and Van Cleve's objection that part two of the backdrop argument does not build on the backdrop thesis in part one, and that the latter, accordingly, serves no real function in the remainder of the backdrop argument. We noticed that the reason for this is that the backdrop thesis and the alteration argument ascribe two widely different functions to substance, as a perceptible backdrop in relation to which changing appearances can be contrasted in the one, and as an altering subject in which changing determinations inhere in the other. I concluded that, although formulated somewhat imprecisely, the objection of Melnick and Van Cleve is well founded.

Since the backdrop thesis was shown to be redundant in the overall argument for substance in the First Analogy, I questioned the credibility of its claim that substance is an object of perception. This introduced an objection posed by Guyer and Van Cleve that it is impossible that substance could be perceptible. Guyer takes this to follow from what Kant says about the transitory character of our representations. I showed that this objection is flawed for two reasons: First, Guyer mixes up the temporal character of a representational act, with the temporal character of representational content. Second, he equivocates of the concept of representation in claiming that substance cannot "represent" time as enduring substrate.

I then explored whether the imperceptibility of substance could be defended by an argument that shows that only determinations are directly perceptible. This directed us into a broader investigation of what determinations and perception is in Kant. I argued that, whereas in pre-critical Kant, a determination was something that pertained to a thing in itself, "determination" in critical Kant acquires a whole new meaning. A determination is now

defined as a synthetic or real predicate, as something that is first legitimately ascribed to an object through synthesis of the sensible manifold. In relation to this, a Kantian perception was shown to be the result of the pivotal determining activity of the categorial functions on the manifold of intuition, which first combines the manifold into objective unity. As a consequence, determinations are only perceptible after this determining process, as synthetically predicated of an object. Moreover, since one of the categorial functions that determines the sensible manifold is the *relational* concept of substance–accident, it is not evident that the substance-concept of that relation has any less reference to the perceptible than the accident-concept; or to turn it around, it is not evident that any of these concepts have reference to the perceptible prior to jointly having brought the manifold into a determinate object. I therefore concluded that it is highly questionable that the determinations can be said to be directly perceptible in a way that substance is not.

The discussion on perceptions and determinations exposed that when the relational concept of substance–accident has determined an object, substance with its accidents becomes an object of perception. However, the concept of substance that we investigate in this thesis, and that is argued for in the First Analogy, is the substance-concept considered apart from the accident-concept, as that which persists while its determinations change. I proposed that substance, considered by itself, could be designated by the concept of the substantial, as substance as persistence. Since it was shown that the substance-concept is determinant of the synthesis of the sensible manifold, and that it is not its determinate result, substance as persistence cannot be an object of perception.

I used the distinction between the substantial as persistence, and substance as determinate object, to show that the backdrop thesis argues for substance as a temporally determinate object and as the determinant of the temporally determining synthesis. The interpretation of substance as an object of perception accordingly renders the overall argument of the Analogies circular. Since the backdrop argument did not prove successful, we therefore moved on to considering the other argument for the principle of the First Analogy – the alteration argument.

The argument as structured by Van Cleve, showed that if it could be established that (FA*) every change is an alteration in an ultimate subject, this subject will qua ultimate subject, have to be persistent through an argument by reduction. The mission was accordingly to find an argument for (FA*). Van Cleve presented an anchoring argument, which said that if it could be established that every change is an alteration in something or other, then (FA*) could be granted together with an anti-regress premise. Van Cleve suggested that the latter

could be found in a passage from the Second Analogy, which I called “the argument from action”. I argued, however, that this anti-regress premise is inadequate to support (FA*), since there is an important difference in the grounding relations between an *acting* subject and the determinations as its effect, and the determinations and the altering subject in which they inhere. Identifying the altering subject with the acting subject through identifying both with a substance in the thick sense would render the alteration argument + p circular.

I then asked whether there could be found any other anti-regress premise in support of (FA*). Since the subject that is to stop the regress is to be “ultimate” in some way, I thought it important to establish what sort of unconditioned a substance could be in Kant. I made it clear that a substance can never be sensibly unconditioned, as if it were an absolute subject exempt from the conditions of our sensibility. I referred to the resolution of the Second Antinomy, which shows that the idea of an ultimate subject, as the idea of simple parts of matter, is a transcendental idea that is not grounded in possible experience. Since Kant restricts the Analogies to a mere empirical use, the substance-concept cannot be applied to what is transcendently real.

Perhaps substance could be unconditioned in its existence? In exploring this possibility, we realized that Kant takes everything in the world of sense to be of a completely contingent existence. Somewhat paradoxically, only that which is causally conditioned for its existence, exist necessarily in the empirical realm. With reference to the discussion on determinations in part one, I showed that the “existence” of determinations simply is a way of existence of the substance in which they inhere. Accordingly, it is *determinate ways* of existence that can be necessary, not existence as such. I finally suggested that a substance could be said to be unconditioned in its temporal mode. As persistence, substance is not preceded by anything in time; it is temporally prior to all other temporal determinations. The temporal priority of substance confers sense to the expression that substance is “the substratum of all time-determination”, but it does not provide an anti-regress premise for (FA*). I finally proposed that an anti-regress premise could be found through the recognition that the subject in which determinations inhere is not an existence-condition of these determinations. The substance–accident relation is thus special in that it does not concern a relation between two existing entities, but rather a relation between existence, and the various ways for this existence to manifest. Accordingly, substance functions as its own anchor.

We then moved on to considering three different arguments that purport to prove the necessity of the substance-concept through an argument that every change must be alteration for the experience of change to be possible. I showed that there are two ways of

understanding “change” as *Wechsel* in Kant, namely, as “existence-change” or as “replacement-change”. The problem of experiencing change thus becomes, respectively, the problem of perceiving the absence of the real, or the problem of having an experience of an objective order of states of affairs, rather than a subjective order of our representations. I argued that there is textual support for both interpretations of change, and that Kant sometimes seems to equate the two.

To explore whether substance could be defended as necessary in virtue of being the altering subject of change, we started with evaluating Guyer’s “argument from verifiability”. Guyer had a three-step set-up, where step one shows the impossibility of the experience of existence-change; step two, the insufficiency of our successive representations to infer objective change; and step three, the necessity of the application of a rule that determines this succession, which again requires a rule that assigns our representations to a subject. The third step points to two necessary conditions for change, reformulated through an alternative definition of change: (i) the incompatibility of certain predicates or states of affairs, and (ii) the synthetic validity of these with respect to an object. Guyer takes the rule that guarantees (i) to be the cause–effect rule of the Second Analogy, and (ii) to be the substance–accident rule of the First Analogy.

Whereas Guyer took the joint contribution of the two necessary conditions to imply the interdependence of the First and Second Analogies, I qualified this claim by showing in which way they are interdependent: The principle of the Second Analogy is conditioned by the First for its application, whereas the argument of the First Analogy is dependent on the result of the argument in the Second. Moreover, I showed that there is a difference between two conditions jointly being sufficient as a necessary condition for objective succession, and being sufficient conditions of the latter. I showed that Guyer actually expects the First and Second Analogies to be sufficient conditions for an inference from a subjective succession of representations to the knowledge of objective change. I argued against this view on the functions of the principles of the Analogies on several grounds.

First, our discussion on perception in Kant has shown that there is no raw, perceptual experience exempt from categorial determination that stands in need of becoming verified. Second, the principles are not to serve as conditions for knowledge as *Wissen*, but the possibility of experience, *Erfahrung*. Since knowledge requires sufficient subjective and objective conditions, the principles of the Analogies are too weak to establish this. On the other hand, as necessary conditions for the possibility of experience, the principles have a transcendental, and not merely empirical role, in first making perceptual experience of

objective states of affairs possible. Third, discussing Van Cleve's objection to the argument from verifiability made it clear that Kant does not argue for the principles as necessary conditions of *actual* experience, but only as conditions of *possible* experience. Finally, we saw that Guyer's epistemic access to substance is provided through the application of the substance–accident rule on the sensible manifold, and that he interprets this as a *positing* of substance in the objects of perception.

We then considered the Kant-Frege view, which takes the problem of experiencing change to be a problem of logically expressing or reporting on absolute existence-change. Since absolute existence-change is impossible to express in standard quantification theory, Van Cleve takes this to prove that absolute existence-changes are impossible, and accordingly, that every change must be an alteration in something or other. I argued that this is to conflate logical impossibility with inexpressibility, since only the former can say something about what is ontologically impossible. The inexpressibility of an existence-change in standard quantification theory is not grounded on the impossibility of an existence-change, but rather on the ground that standard quantification theory already presupposes existence. We remember Van Cleve's claim that we do not perceive, but only conceive of substance. If “conceiving of” is taken in the sense of being able to logically express, it is a route through pure thinking and as such does not qualify as an epistemic route to substance.

Finally, we returned to Allison's reading of the alteration argument. I argued that although reminiscent of Guyer's argument in structure, Allison's alteration argument is not explicative in the way that the argument of Guyer is. This is due to Allison (i) skipping the problematic of perceiving the absence of the real, and (ii) not bringing in the principle of the Second Analogy to guarantee that necessary order of our perceptions. Accordingly, it is not evident why the ascription of two representations to a common subject would first make the experience of change possible. Allison's attempt of an argument for this is the claim that only through regarding our representations as alteration in a subject can we have experience of replacement-change. However, since Allison defines a *genuine* replacement-change as alteration, Allison's argument becomes circular, or at least highly uninformative.

I further argued that although I favor the set-up of the argument from verifiability, I believe Allison to be the one that has the right understanding of what the principles of the Analogies are to prove, namely, the possibility of experience in the fundamental sense. We furthermore learnt that Allison takes experience to be the connection of perceptions in judgment. The upshot of this is that on Allison's conceptualist account, the backdrop argument does not commit a logical fallacy, since perceptions are not yet temporally

determinate. However, the backdrop thesis plays no role in Allison's own account of how the substance–accident rule is to be applied to the objects of perception, and as such, I still conclude the backdrop argument to be unsuccessful.

The big drawback with Allison's conceptualist interpretation of the principles of the understanding is that it makes the Deduction unfinished. The relational categories are not shown to be necessary for the possibility of perceptual experience, but only for thick, conceptualized experience. I therefore presented an alternative view on perceptions that can account for the necessary role of the relational categories for the possibility of perception, and that could still make sense of experience as the cognition of connected perceptions. I challenged the presupposition that perceptions display determinate objects understood only as composed homogeneous manifold, and proposed that they can also comprise existence-relations. As such, connected perceptions (*verknüpfte Wahrnehmungen*) can be connected from within. I presented some textual support that Kant speaks of determinate objects in this inclusive way, as to comprise existence-relations as occurrences.

Finally, Allison takes the substance–accident rule to be a rule for connecting perceptions into thoughts. This, together with how he takes the possibility of experience to require that we “presuppose” or “conceive of” something as substance, makes the application of the substance-concept a positing such as it was in Guyer. Common to all three arguments considered in support of the claim that every change is alteration, is therefore that they provide an access to substance through thinking or *conceiving of* it in the objects of perception.

In the final section I showed that the way of encountering substance through conceiving of it in the objects of perception is in danger of rendering substance into an ultimate subject of predication. This happens when substance is considered apart from its schema, persistence, and is considered only as a subject in which determinations inhere. There is then the risk of making substance into that which is to give objective unity to our representations, and at the same time render it the referent of these representations as their object in which they inhere. In this way substance becomes over-objectified both in function and reference. In function, in that it is given the task of bringing representations to objective unity, a task which belongs to the objective unity of apperception, and in reference in that it is taken to be the object that is yet to be determined, i.e., the transcendental object as an object in general.

Ultimately, I showed that considering substance apart from its schema made the substance-concept vulnerable of being turned into a transcendently real object. Stripped for

its binding condition of sensibility, the ultimate subject of predication can again become substantiated, or filled with determinate content. This happens when the ultimate subject is turned into the inner object in which all our representations inhere, or the outer object that is the cause of our representations, while at the same time receiving anew the property of persistence. In the first case it becomes the immortal soul, in the second a noumenon in the positive sense, or what is the same, a thing in itself.

4.2 CONCLUDING REMARKS

The investigation of substance in Kant has provided us with some answers to what a Kantian substance is and what epistemic access we can have to it.

To answer how substance is to be encountered in the objects of perception, it must first be clarified on what level this encounter is to happen. If it is to occur on an empirical level, then we are presented with two options: perceiving substance as a determinate object, or inferring to substance from other objects of perception. The backdrop thesis argues for substance as a perceptible backdrop, whereas Guyer suggests inference as a route to substance since he believes substance to be imperceptible. We also discussed whether Guyer could mean that we have knowledge of substance in the sense of *Wissen*, but we concluded that his definition of knowledge must be less demanding than the Kantian one. Perceiving, inferring and knowing substance, are all epistemic routes to substance on the empirical level. This has two consequences: (i) these routes will require sufficient conditions for the perception, inference or knowledge of substance to be possible, and (ii) the substance that is encountered is an empirical object, i.e., a temporally determinate, perceptible object. We have seen that, in a derivative sense, substance is a determinate object with determinations in Kant. However, the substance that is argued for in the First Analogy is substance as persistence, i.e., substance as determinant of the synthesis of the sensible manifold to objective unity. Accordingly, these ways of encountering substance does not offer access to the concept of substance, the application of which is necessary for the experience of change to be possible.

If the access is rather interpreted to be on a transcendental level, then substance is not to be encountered through perception and experience, but rather through making perception and experience possible. In this way, substance is interpreted as a determinant concept that brings the sensible manifold to objective unity through the application of the substance–accident rule. There are different ways of interpreting how the application of the substance–concept occurs: Substance can be applied to the representations as a subject in which these

representations are to inhere as its determinations, or substance can be considered in the relational concept of substance–accident, in which both conceptual constituents subsumes representational content. In the first sense, there is a risk to over-objectify substance such that it becomes a transcendental object. This way of interpreting the application of the substance–rule often appears as a “positing”, “presupposing” or “conceiving of” substance, i.e., it is an imposition view on categorial application.

In the second way of looking at the application of the substance–concept, the relata that are to be subsumed under the relational concept can be considered to be either (i) perceptions, or (ii) sensible manifold. If one adheres to a conceptualist account as Allison, there is no problem in taking the substance–application to mean (i). According to the conceptualist view, perceptions are not determinate objects, and since we have shown that there is no necessary relation between the temporal character of the representational act and its representational content, perceptions might depict persistence. I have argued that a problematic consequence of the conceptualist view is that the objective validity of the relational categories is first proved in the Analogies, and not in the Deduction.

With respect to the second view, it is not immediately clear what there is in sensible intuition that is to guide the application of the categories to exactly this or that manifold. Moreover, this interpretation has a tendency to rendering the pure concepts of the understanding empirical concepts, in that they appear to be conditioned by the empirical manifold. The latter is a typical interpretative view on the application of the substance–accident rule. Common to both interpretations of accessing substance through the application of the substance–accident rule, is that substance is encountered through *judging* substance to be in the objects of perception. To this there is a risk of rendering substance into a thought-entity. On the other side, there is no risk of rendering it into an already determinate *empirical* object, since it is that which first makes these objects possible. Substance considered in this sense, is substance as persistence, or the substantial.

I believe the most promising account of substance is the one that emphasizes its necessary function through the application of the substance–accident rule, and as such I prefer the alteration argument as an argument for substance. However, I am hesitant to adopt an imposition view on how this rule is to be applied to the sensible manifold. We have seen examples of what happens when substance is considered apart from its sensible condition. Accordingly, I believe it is important that the schema of substance plays a role in the application of the concept to objects of sensible intuition. Accordingly, I still believe there to be an account for how to encounter substance *as persistence* in the objects of perception,

other than positing it there, as one prefers. That is, persistence should have a prominent place in the explanation of what a Kantian substance is and how the substance-concept attains objective validity. To find an answer to this, it could be interesting to explore how substance as persistence is to “represent time in general”, and in virtue of what it is “the sole condition of the empirical unity of time.” These questions will have to wait for another inquiry into the concept of substance.

For now it suffices to conclude that in any discussion of the concept of substance in Kant, it is important to remember both the determining function of the substance-concept, and the sensible condition under which it first can have application, and as such, objective reference. Considering substance apart from its schema is to consider substance beyond the limits of sensibility, and thus beyond objects of possible experience:

For only this persistence is the ground for our application of the category of substance to appearance, and one should have proved that in all appearances there is something that persists, of which that which changes is nothing but the determination of its existence. But since such a proof can never be conducted dogmatically, i.e., from concepts, because it concerns a synthetic *a priori* proposition, and it was never considered that such propositions are valid only in relation to possible experience, hence that they can be proved only through a deduction of the possibility of the latter, it is no wonder that it [...] has never been proved.²⁸¹

²⁸¹ A184–85/B227–28.

5 BIBLIOGRAPHY

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